

GRAIN DEALERS JOURNAL

Devoted to the construction and operation of better grain handling plants.

Fawcus Herringbone GEAR DRIVES



Installed at
Baltimore & Ohio Elevator
Locust Point, Md.

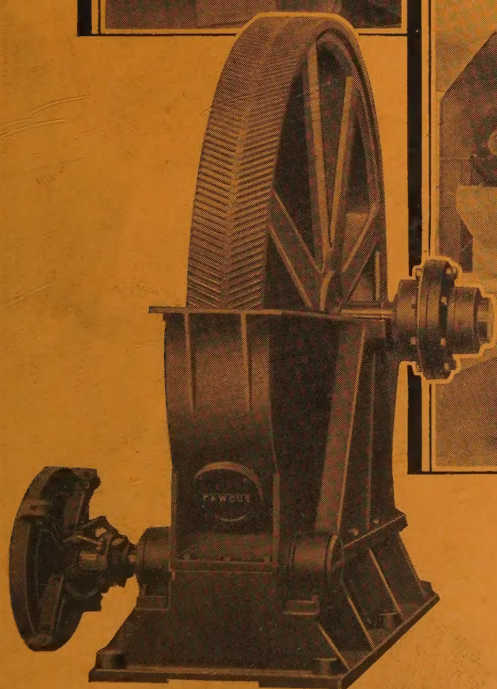
The Fawcus Herringbone Gear Drives installed in this elevator were used on the 11 receiving and shipping legs requiring 175 Horsepower in a single reduction of gears 485 to $27\frac{1}{2}$ R. P. M. Motors connected to pinion by a Webster special steel plate clutch and gear shaft to elevator head shaft by a FAWCUS Semi-flexible coupling.

Nine drives for clipper and cleaner legs requiring 75 Horsepower 725 to $28\frac{1}{2}$ R. P. M. equipped the same way with clutch and Fawcus couplings.

FAWCUS MACHINE CO.
PITTSBURGH, PA.

Representatives

NEW YORK, N. Y.	SAN FRANCISCO, CAL.
Robt. C. Brown, 84 Pine St.	K. W. Eichelberger
MILWAUKEE, WIS.	BIRMINGHAM, ALA.
L. E. Meidinger	G. R. Mueller Co.
PORTLAND, ORE.	CHICAGO, ILL.
Coast Steel Machinery Co.	Hodgart & Co.
NEW ORLEANS LA.,	Southern Jobbers Supply Co.
ST. LOUIS, MO.,	A. Burt Champion, 506 Olive St.



Fawcus Herringbone Gears in
Baltimore & Ohio Grain Elevator
which was designed by
John S. Metcalf Company
Erected by
The M. A. Long Co.
Consulting Engineer
L. A. Stinson

FAWCUS GEAR DRIVES STAND FOR GREATER PRODUCTION

After twenty-five years of continuous and successful grain elevator construction, it has been my pleasant privilege to have been associated with the engineering and construction of the new Baltimore and Ohio elevator serving as the railroad's consulting engineer since the destruction by fire of its former plants which this "last word" grain handling facility replaces.

L. A. Stinson, President

L. A. Stinson Co.

332 S. La Salle St.

Chicago, Ill.

THE M. A. LONG CO.

Engineers --- Constructors

Grain Elevator Department

Grain Elevators—Flour and Feed Mills—Storage Bins, Etc.

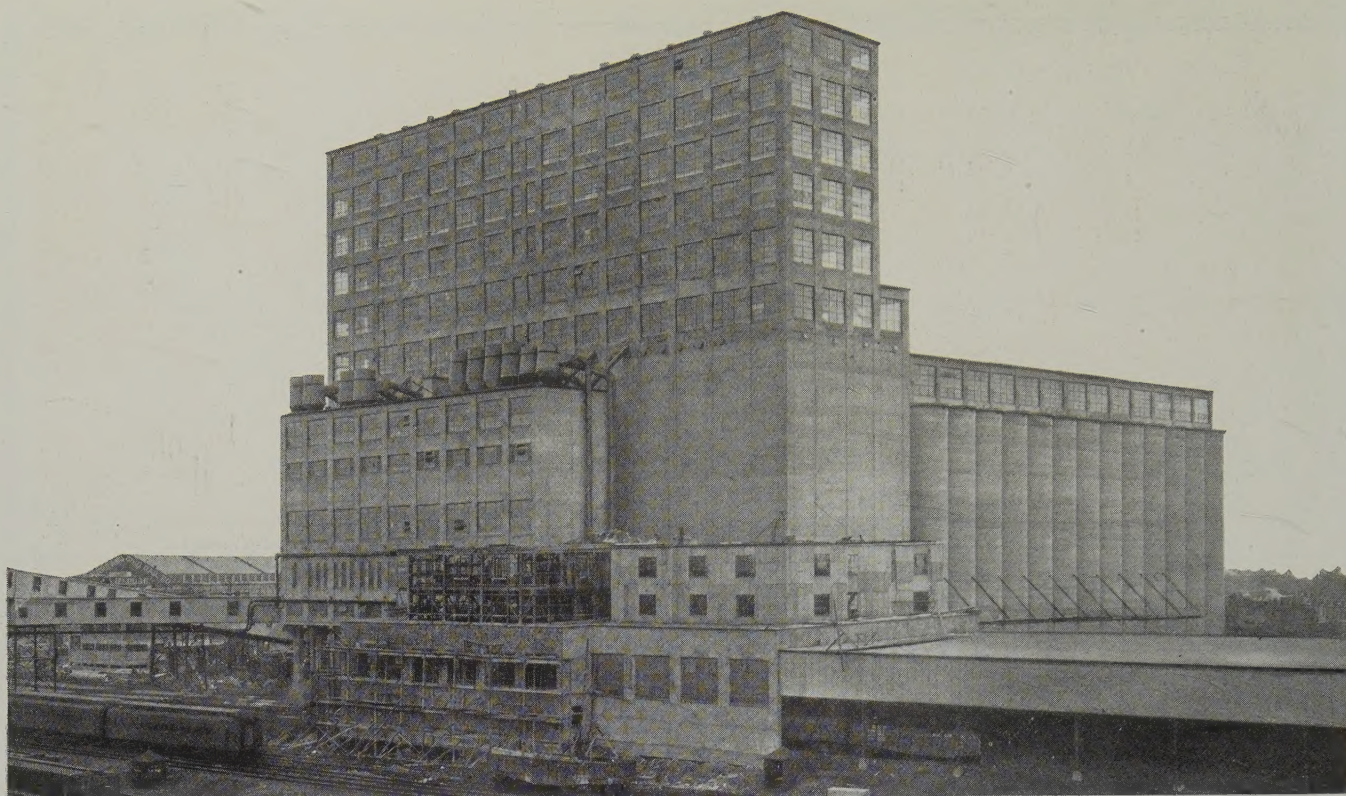
Baltimore, Md.

Builders of

B. & O. Elevator

3,800,000 Bus. Capacity

Locust Point, Baltimore



**Baltimore and Ohio Railroad Company
Terminal Elevator, Baltimore, Md.
Capacity 3,800,000 Bushels**

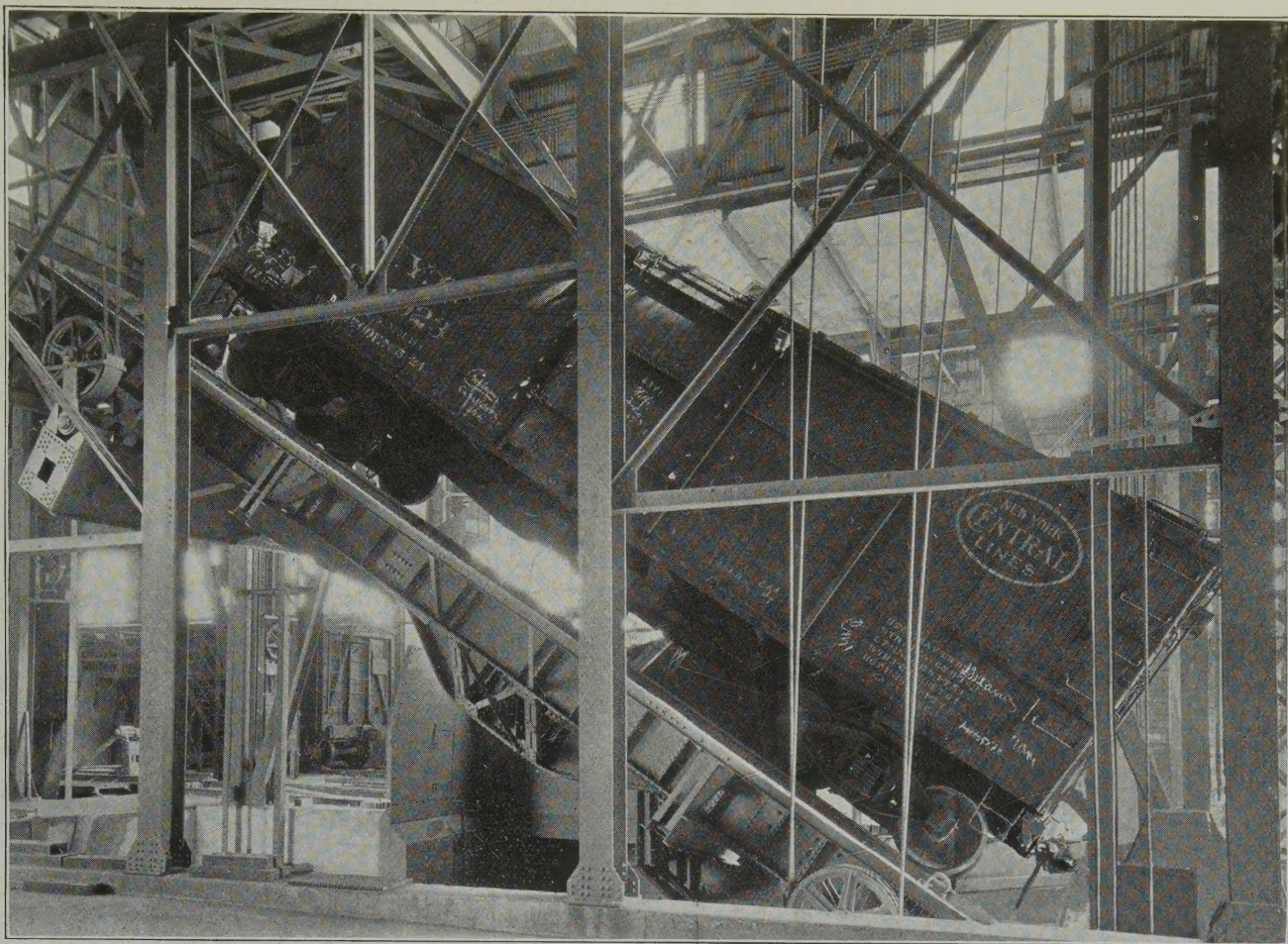
This elevator which embodies every known feature of grain handling efficiency, making it the most complete and rapid grain plant in the world was built from plans by

John S. Metcalf Co.

108 South LaSalle St., Chicago, Ill.

Montreal, Quebec

Vancouver, B. C.



Four Metcalf Car Unloaders Installed

in the

Baltimore & Ohio Railroad Co.'s New Terminal Elevator

Baltimore, Md.

Other Installations

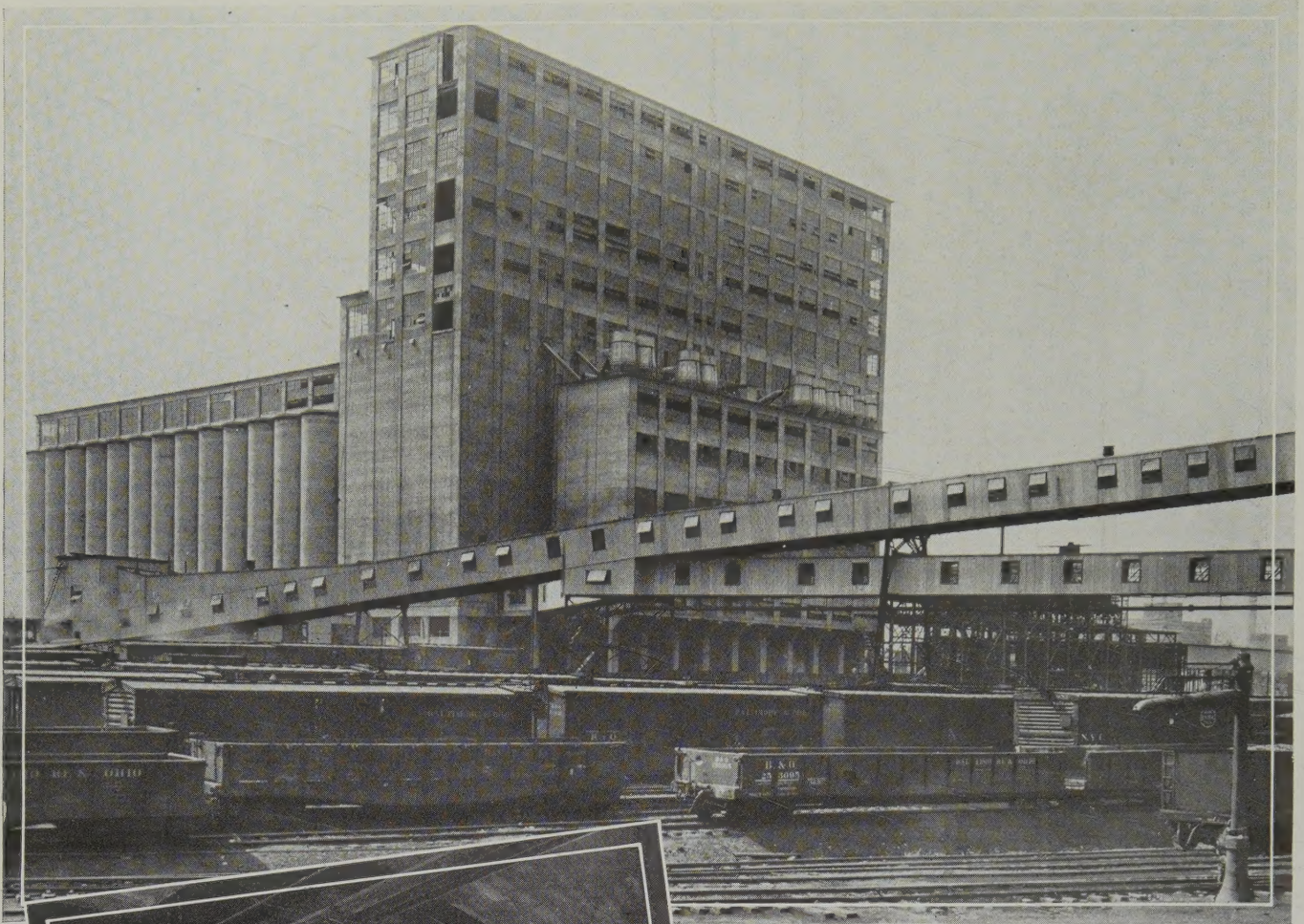
Harbor Commissioner's Elevator B, Montreal	1 unloader
Harbor Commissioner's Elevator No. 3, Montreal	4 unloaders
Atchison, Topeka & Santa Fe Railway Co. Elevator A, (Now under construction) Argentine, Kansas	4 unloaders

John S. Metcalf Co.

Chicago

Montreal, Que.

Vancouver, B. C.

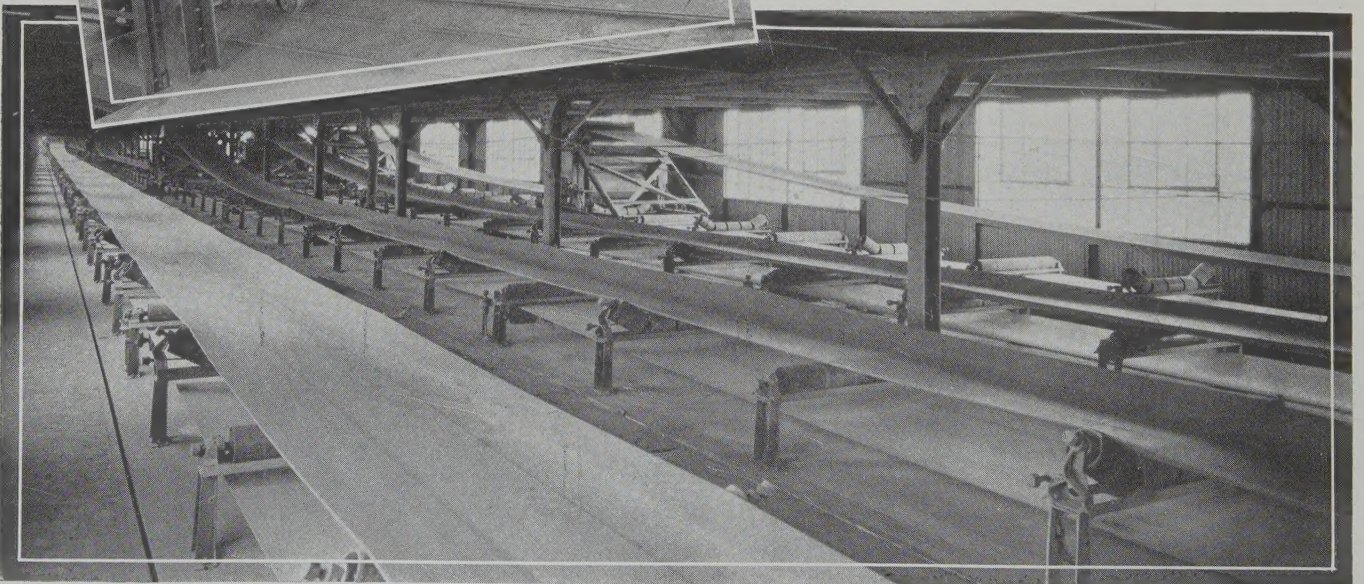


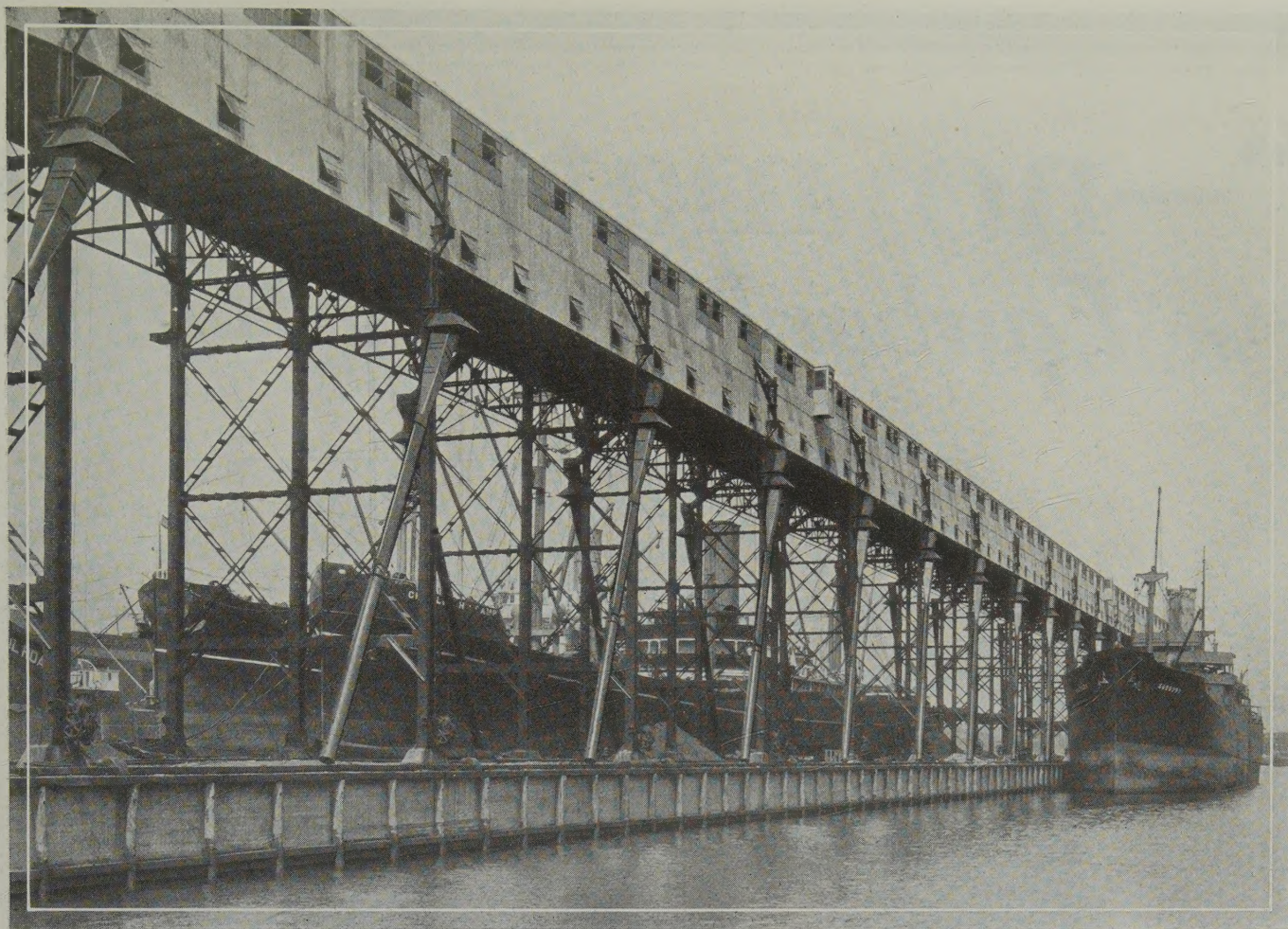
ANOTHER WEBSTER

Designed By
JOHN S. METCALF CO.,

Erected By
M. A. LONG CO.

Consulting Engineer
L. A. STINSON





EQUIPPED TERMINAL GRAIN ELEVATOR

Baltimore and Ohio R. R. Co. Elevator

Locust Point, Baltimore, Maryland

Capacity 3,800,000 Bushels

There is only one kind of service that grain merchants demand of their operating equipment, and that is **reliable service**. On that one feature alone Webster reflects upon a long list of notable successes. It is the biggest reason why Webster equipment is found in the many grain elevators which spot our country.

At Locust Point, Baltimore, where there has been completed the most modern and one of the largest

grain elevators, owned and operated by the Baltimore and Ohio railroad, the entire elevating, conveying and spouting equipment is of Webster design. It proved to the builders that by specifying Webster equipment they would be assured of a full measure of returns.

Our qualified engineers will be glad to give you first hand data on your requirements. Remember, Webster offers you that fine balance of "reliable service and satisfaction."

THE WEBSTER MFG. COMPANY

4500-4560 Cortland St.,
Chicago

WEBSTER

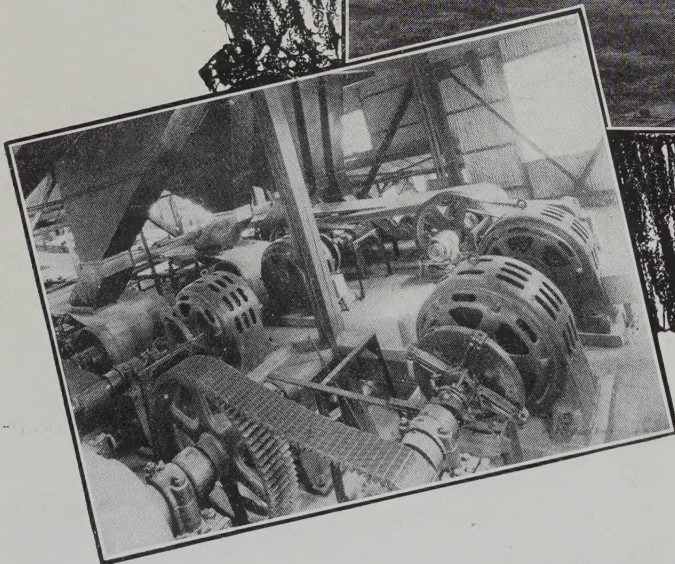
Grain Elevator Equip-
ment
Belt Conveyors
Car Loading Spouts
Marine Legs
Automatic Power
Shovels
Bucket Elevators
Distributing Spouts
Car Pullers
Dock Spouts

Webster Inglis Limited, Toronto, Ont.

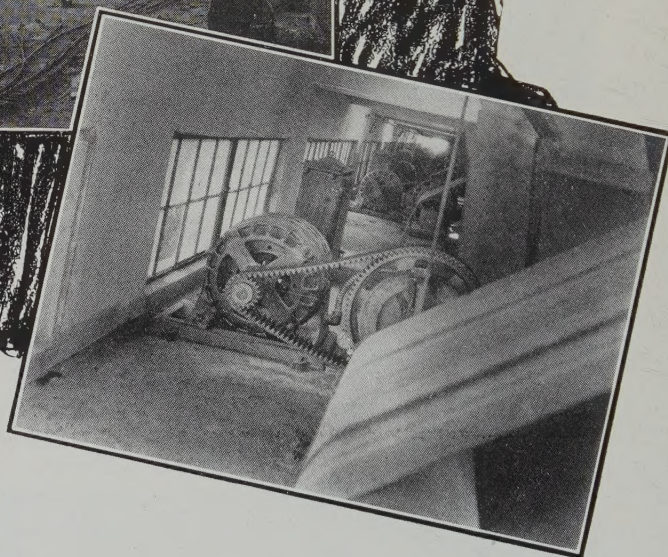
“—no matter how *Fairbanks-Morse Ball Bea*



B. & O. Grain
Elevator, Locust
Point, Baltimore,
Maryland.
3,800,000 bushel
capacity.



4—150-H. P. Fairbanks-Morse Ball
Bearing Motors driving 4—42" con-
veyor belts over Pier No. 7; capacity
of belt 25,000 bushels per hour.



10—40-H. P. Fairbanks-Morse Ball
Bearing Motors driving 10—48"
conveyor belts in gallery over
storage bins.

FAIRBANKS-MORSE

Large the motor g Motors give better results''

Elevator service provides a real motor test. Dust and heat conditions are severe. Equipment must withstand capacity operation for months during peak load seasons.

For this trying work grain elevator engineers consistently specify Fairbanks-Morse Ball Bearing Motors. Their superiority has been repeatedly proved in grain elevators throughout the world. In the New Orleans Public Elevator, The Norfolk Municipal Elevator and the Missouri Pacific Elevator at St. Louis these dependable motors were used to the practical exclusion of every other make.

And now, as further proof, the B. & O. has equipped its Baltimore elevator with 145 Fairbanks-Morse Ball Bearing Motors. Every motor over 10 horsepower is of this famous make. This includes the powerful 175 horsepower motors that drive the huge 25,000 bushel-per-hour legs.

The Baltimore & Ohio has proved that no matter how large the motor, Fairbanks-Morse ball bearing type gives better results. Lubrication service is turned into a once-a-year, twenty-minute job. Trouble from dust and grit—the greatest enemies of bearings—is eliminated. Failures from mechanical causes are reduced 70 to 90 per cent. There is no oil spatter to increase fire risk.

One of our experienced engineers will be glad to discuss your motor problem with you. Or complete bulletins on request.

FAIRBANKS, MORSE & CO.

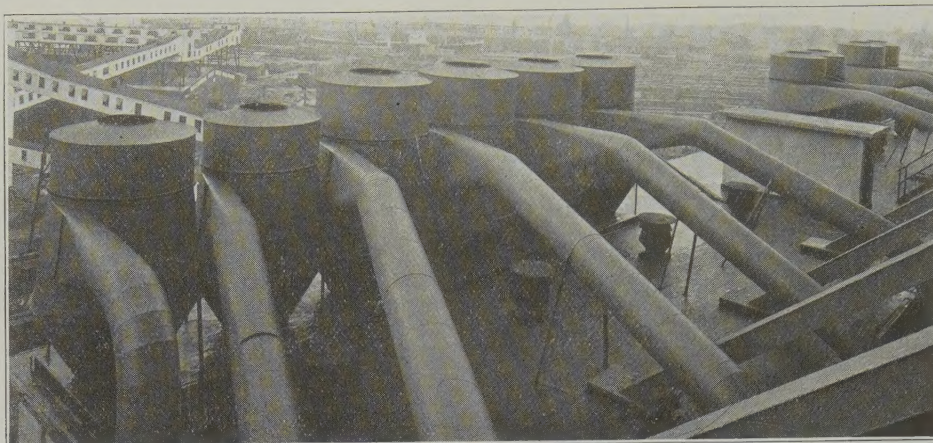
Manufacturers

Chicago

28 branches throughout the United States, each with a service station

Ball Bearing Motors

FAIRBANKS-MORSE GAVE THE BALL-BEARING MOTOR TO INDUSTRY



**The Finest Dust Collecting System
Ever Installed**
in any Elevator was furnished for the B. & O. Elevator
by

Robert Gordon, Inc.

22 W. Austin Ave.

Chicago, Illinois

Under Direction of John S. Metcalf Co., Engineers

Ocean Freight Services

Atlantic Transport Line...Baltimore to London
White Star Line.....Baltimore to Liverpool
Leyland Line.....Baltimore to Manchester
Red Star Line.....Baltimore to Antwerp
American Line.....Baltimore to Hamburg
Head Line—Lord Line
.....Baltimore to Belfast and Dublin

For rates and particulars apply to

ATLANTIC TRANSPORT COMPANY, Agts.
201 to 209 Chamber of Commerce Building,
Baltimore, Maryland

or one of our many offices conveniently located
near you.

LIGHTERAGE DEPARTMENT,
209 Chamber of Commerce Building,
Baltimore, Maryland

Tug boats, covered and open lighters for harbor
transportation.

STEVEDORE DEPARTMENT,
Foot of Clinton Street, Canton,
Baltimore, Maryland

Prompt and efficient service.

WHAT DO YOU NEED?

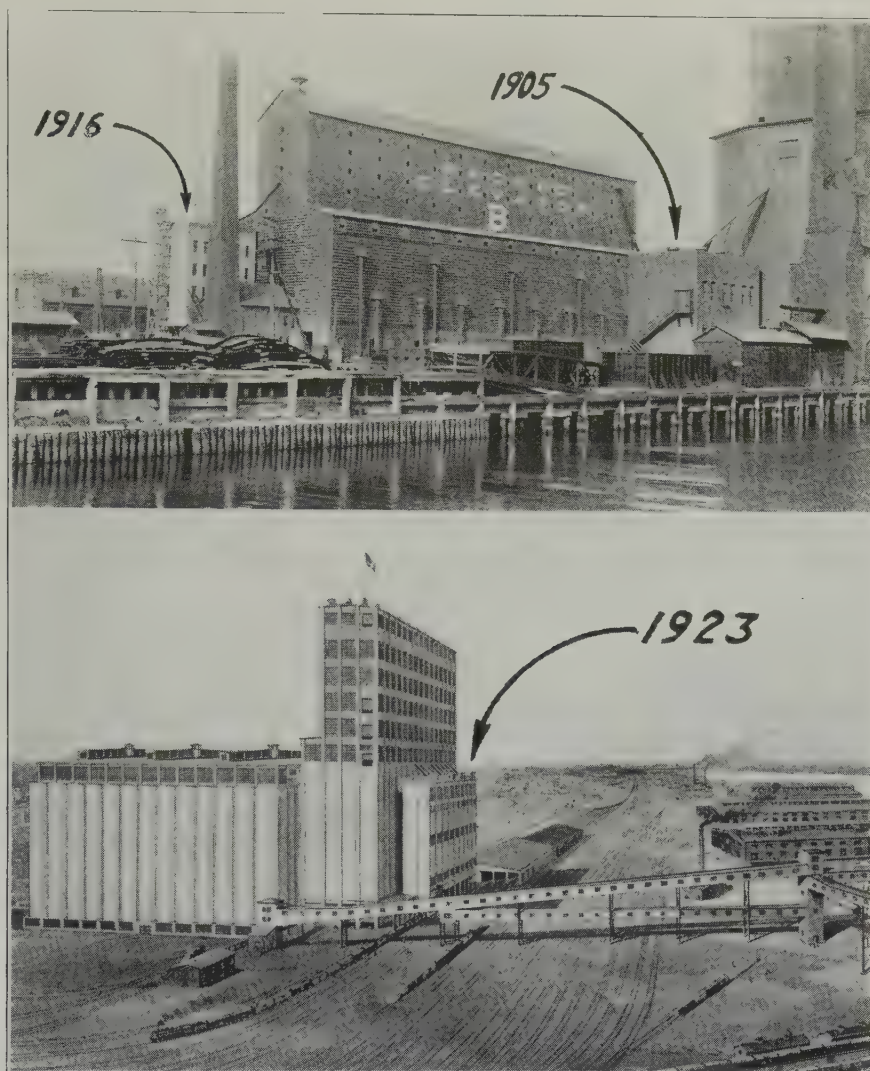
to modernize your plant so it will minimize your
labor and increase your profits? Is it here?

Account Books	Grain Tables
Agricultural Gypsum	Lightning Rods
Attrition Mill	Magnetic Separator
Bag Closing Machine	Manlift
Bags and Burlap	Moisture Tester
Bearings { Roller	Mustard Seed Separator
Belting { Ball	Oat Bleachers and Purifiers
Bin Thermometer	Oat Clipper
Boots	Oat Crusher
Buckets	Pneumatic Conveying Equipment
Car Liners	Portable Elevator
Car Loader	Power { Oil Engine
Car Mover	{ Gas Engine
Car Puller	{ Motors
Car Seals	Power Shovel
Cleaner	Radio Equipment
Claim (R. R.) Collection	Railroad Claim Books
Clover Huller	Renewable Fuse
Coal Conveyor	Sample Envelopes
Corn Cracker	Scales
Conveying Machinery	Scale Tickets
Distributor	Scarifying Machine
Dockage Tester	Self-Contained Flour Mill
Drain Circulating Pump	Separator
Dump	Sheller
Dust Collector	Siding-Roofing { Asbestos
Dust Protector	{ Steel
Elevator Brushes	Silent Chain Drive
Elevator Leg	Speed Reduction Gears
Elevator Paint	Storage Tanks
Feed Mill	Spouting
Fire Barrels	Testing Apparatus
Fire Extinguishers	Transmission Machinery
Friction Clutch	Transmission Rope
Grain Driers	Waterproofing (Cement)

Draw a line through the supplies wanted, and write
us regarding your contemplated improvements or
changes. We will place you in communication with
reputable firms specializing in what you need, to
the end that you will receive information regarding
the latest and best.

Information Bureau

Grain Dealers Journal, 309 So. La Salle St., Chicago



Nineteen Years A Customer

We installed our first HESS DRIER at Baltimore for the B. & O. Railway at its Locust Point export Elevator in 1905. In 1916 this drier was duplicated.

Now we have completed, for the same customer in the new terminal, one of the world's largest driers, to handle 100,000 to 150,000 bushels of Corn daily.

Hess Interlocked Steel Gratings (Patented)

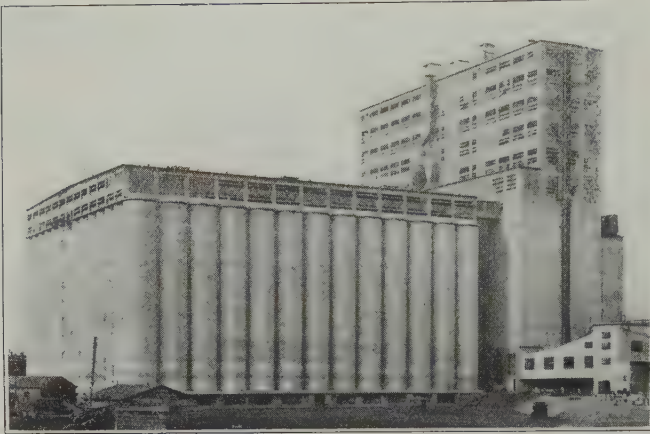
are used throughout the B. & O. Elevator for stair treads, landings and elevated floors. They prevent accumulation of dust and are always clean. They are the strongest for their weight, not depending upon welds nor rivets for their strength. Absolutely clean. Simplest in construction.

Write for sample and prices.

Hess Warming & Ventilating Company

1208 S. Western Ave.

Chicago, Ill.

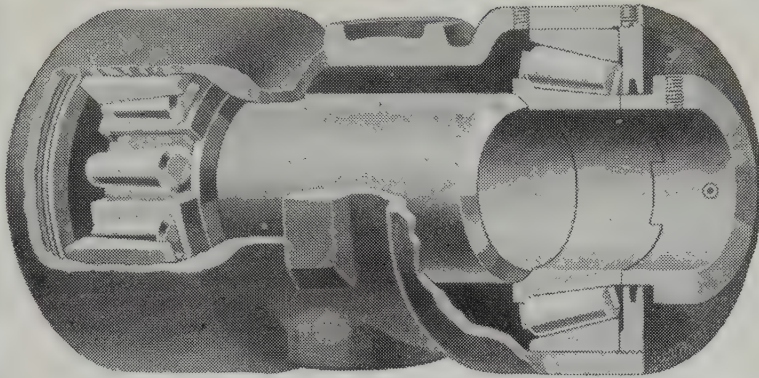


This Elevator Equipt with the DOW SPIRAL SLIDE Fire Escape

Note the fire escape starting from the top of the working house and running to the ground.

Every effort was made in designing the B. & O. Elevator to provide escape in the event of fire or dust explosion. The B. & O. installation of the Dow Spiral Slide Escape warrants careful consideration by every elevator operator and ouilder.

THE DOW CO.
INCORPORATED
LOUISVILLE, KY.



Several hundred bearings were required for the B. & O. Elevator job. Shaft diameter ranged from 2 15/16" to 6 1/2".

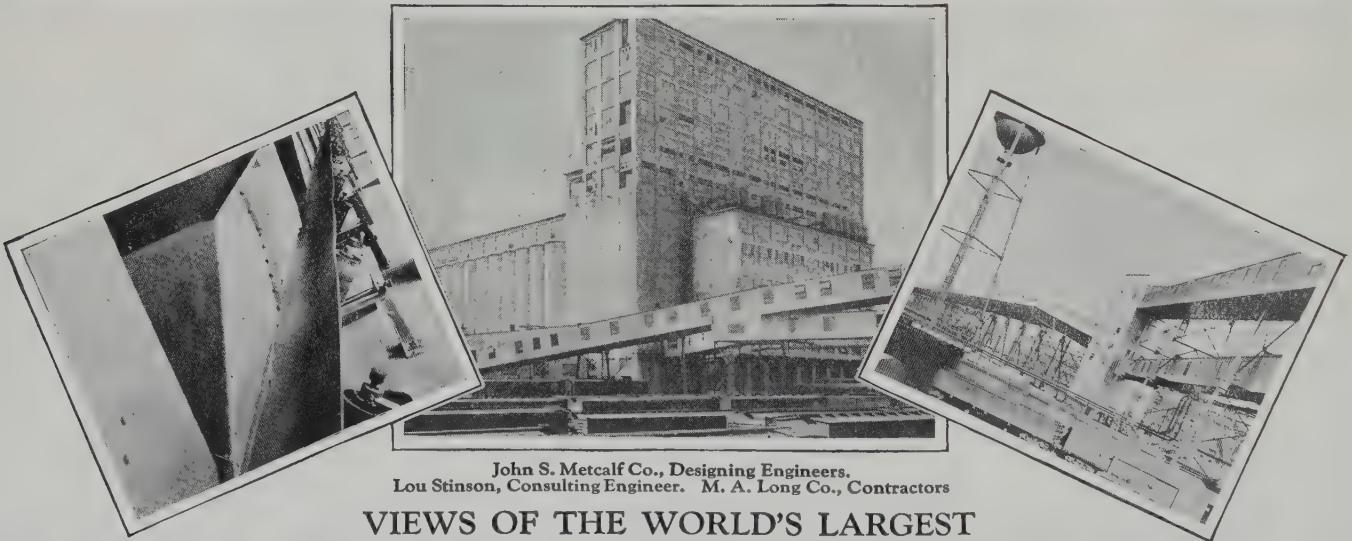
This Is The Bearing

installed in the new B. & O. Elevator. It was the largest bearing contract filled in 1924 and for 15 years this bearing has been operating in mills and elevators. Its record is the engineers' assurance that it is the safe bearing to specify. Three times the capacity of automobile bearings size for size. Write for interesting information and prices.

Wm. E. Pratt Mfg. Co.

190 N. State St.

Chicago, Ill.



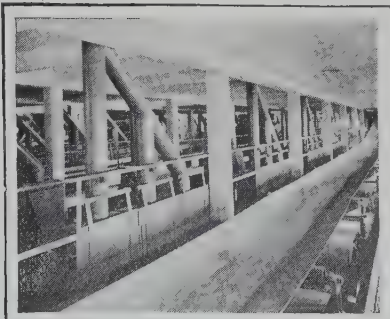
John S. Metcalf Co., Designing Engineers.
Lou Stinson, Consulting Engineer. M. A. Long Co., Contractors

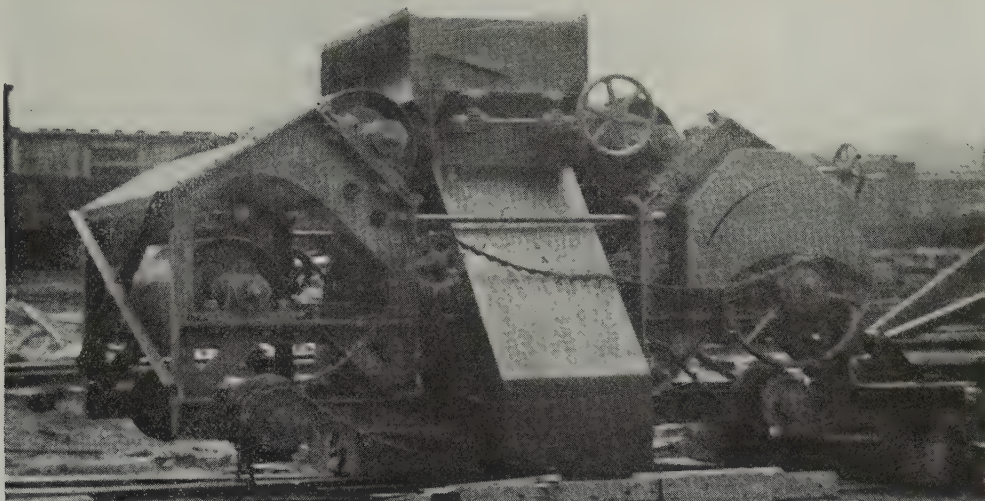
VIEWS OF THE WORLD'S LARGEST GRAIN BELT INSTALLATION

The Diamond Rubber Company of Akron, Ohio, furnished the 9 1/2 miles of grain belts used in this great Baltimore and Ohio wonder house of grain at Baltimore, Md. Write Diamond for the best proposition on any belting installation.

THE DIAMOND RUBBER CO., Inc.
Akron, Ohio

Diamond
RUBBER BELTS





Hyatt equipped four pulley reversible tripper for installation in Locust Point Elevator of Baltimore and Ohio Railroad.

Hyatt Equipped Trippers In Locust Point Grain Elevator Of Baltimore and Ohio Railroad

THE pulleys of the 23 trippers in this important elevator are mounted on Hyatt roller bearings. The trippers were built by The Webster Manufacturing Company, who have furnished Hyatt equipped trippers for many of the largest grain elevators in the United States and Canada.

Hyatt bearings were selected for this service for the following reasons:

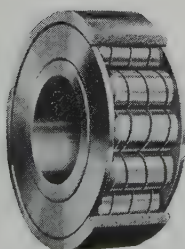
Heavy loads carried by tripper pulleys require durable and dependable bearings for continuous operation.

The true rolling motion of Hyatt bearings reduces friction to a minimum.

Their positive oiling action insures that all bearing surfaces are properly lubricated at all times.

Absence of plain bearing friction results in cool running bearings and eliminates the fire and dust explosion hazards from those locations.

When installing conveying and elevating systems, consider the importance of the bearings. By specifying Hyatt roller bearings, you can secure operating economy and reliable performance.



Write for a copy of the Hyatt Conveyor Bulletin. It contains designs, photographs of installations, and valuable engineering information.

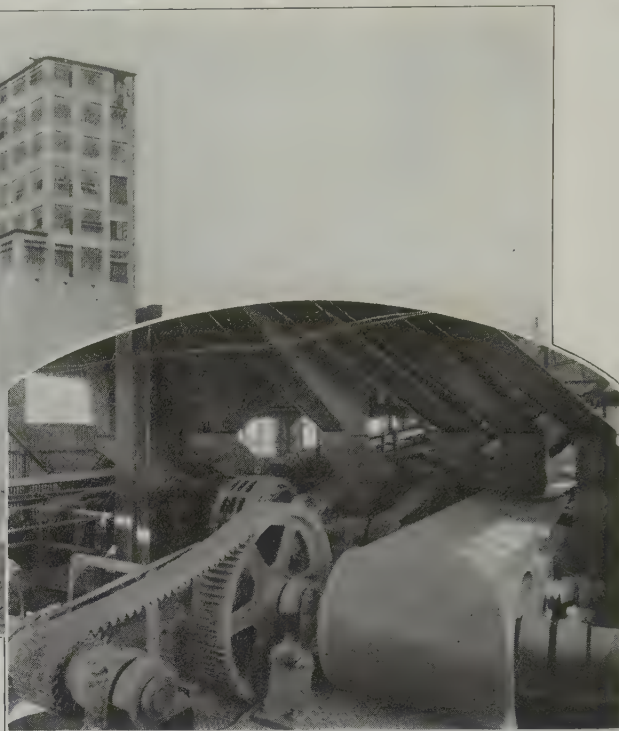
HYATT ROLLER BEARING COMPANY
NEWARK DETROIT CHICAGO SAN FRANCISCO
WORCESTER PHILADELPHIA CHARLOTTE
PITTSBURGH CLEVELAND MILWAUKEE



SILENT CHAIN DRIVES



B. & O. Elevator, Baltimore, designed by John S. Metcalf Co.; constructed by M. A. Long Co., L. A. Stinson, consulting engineer.



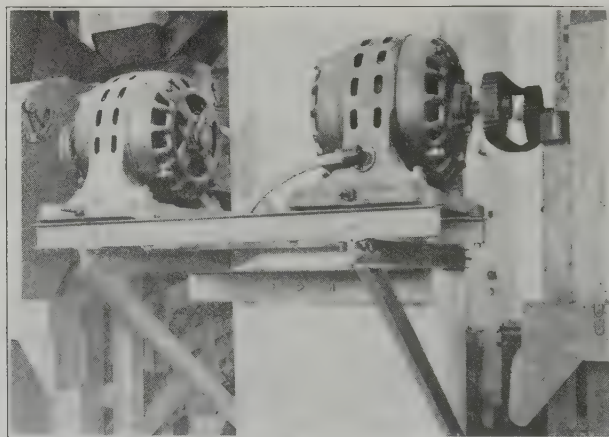
Morse Silent Chain Drives on 6th floor of Tower "B" driving Conveyor Belts.

Morse Chains in B. & O. Grain Elevator

To meet the requirements of present day grain handling at American Ports the Baltimore and Ohio Railroad, in the design and construction of its 3,800,000 bushel grain elevator at Locust Point, Baltimore, demanded the best in every class of material and equipment. It was for this reason that 66 Morse Silent Chain Drives totaling 3290 h.p. were installed.

To all designers, builders and operators of grain handling plants the installation of Morse Silent Chain Drives throughout this most modern of grain elevators has definite significance—dependability.

The Morse Chain Co. maintains a corps of engineers whose abilities and the facilities of its factory are offered you for the working out of your power transmission requirements.



Morse Silent Chain Drives on Invincible Cleaners, 1st floor of workhouse.

MORSE CHAIN CO., ITHACA, N. Y.

There is a Morse Engineer near you

ATLANTA, GA.

702 Candler Bldg., Earl F. Scott & Co.
BALTIMORE, MD.....1402 Lexington Bldg.
BOSTON, MASS.....141 Milk Street
CHARLOTTE, N. C.....404 Commercial Bank Bldg.
CHICAGO, ILL.

Room 803, 112 West Adams St.
CLEVELAND, OHIO.....421 Engineers Bldg.
DENVER, COLO.....211 Ideal Bldg.
DETROIT, MICH.....7601 Central Avenue

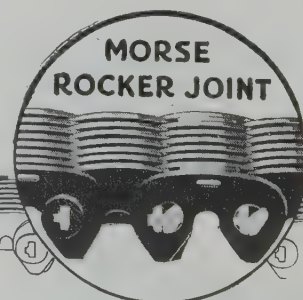
TORONTO, ONT., CAN.....Strong-Scott Mfg. Co.

NEW YORK CITY.....Room 1871, 50 Church St.
MINNEAPOLIS, MINN.

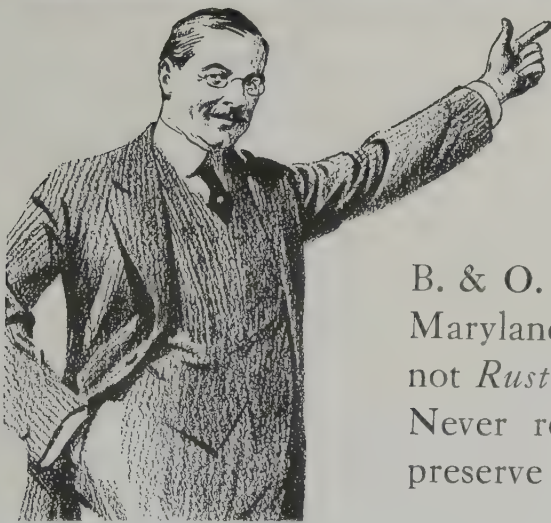
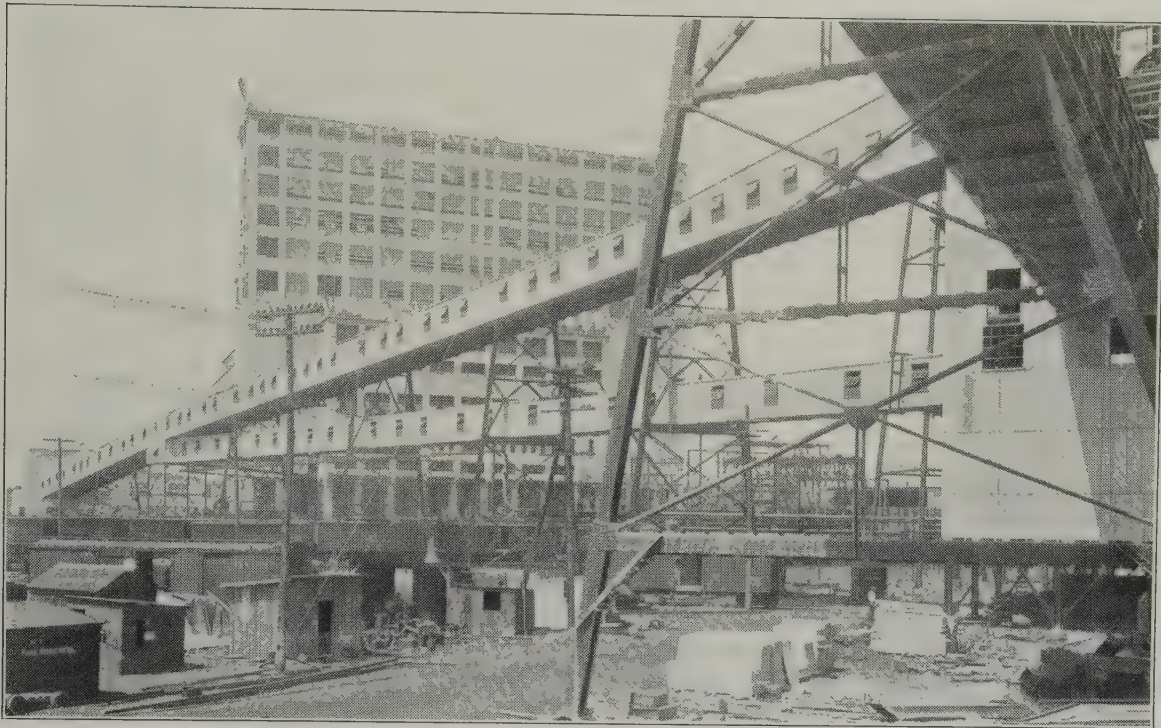
413 Third Street, S. Strong-Scott Mfg. Co.
PHILADELPHIA, PA.....803 Peoples Bank Bldg.
PITTSBURGH, PA.....Westinghouse Bldg.
SAN FRANCISCO, CAL.....Monadnock Bldg.
ST. LOUIS, MO

Railway Exchange Bldg., Morse Chain Co.
WINNIPEG, MAN., CAN.

Dufferin Street, Strong-Scott Mfg. Co.

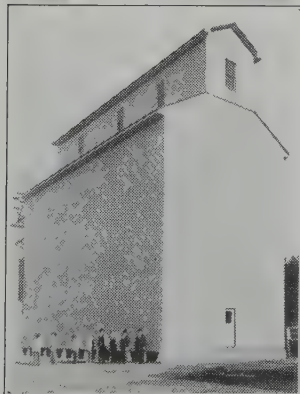


Safety First! Baltimore Elevator Protected Against Fire



Ambler Asbestos Corrugated

used here by the Construction Engineers for the conveyor galleries, towers and pent houses of the new B. & O. R. R. Grain Elevator at Baltimore, Maryland, because it is FIREPROOF, will not *Rust, Rot or Deteriorate*, it is everlasting. Never requires paint or other coatings to preserve it.



PROTECT YOUR ELEVATORS AGAINST FIRE



ASBESTOS SHINGLE, SLATE & SHEATHING CO., Ambler, Penna.

BRANCH OFFICES: Baltimore, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Milwaukee, Minneapolis, New York, Philadelphia, Pittsburgh, Syracuse, Wilkes-Barre, Washington, Toronto, Havana, Cuba.
DISTRIBUTORS: R. V. Aycock Co., St. Louis—Kansas City—Houston—Tulsa; J. A. Drummond, Los Angeles—San Francisco; H. G. Sperry Company, Salt Lake City—Seattle; Dixie Asbestos Company, Birmingham, Ala.

Dennis & Company, Inc.

Chamber of Commerce, Baltimore, Md.

GRAIN

Commission

Forwarding-Brokerage

Members
Baltimore Chamber of Commerce,
Chicago Board of Trade,
New York Produce Exchange,
Grain Dealers' Nat'l Association.

Route the BLACKBURN Way

When shipping to us you may consider
it the same as giving us
Power of Attorney.

COMMISSION MERCHANTS

Your interests are protected
in every way.

RECEIVERS

Bill all grain your order notify us
"for export"

EXPORTERS

C. P. Blackburn & Co., Baltimore, Md.

G. A. HAX

J. B. WM. HAX

FOR BEST RESULTS

Consign Your Grain

—TO—

G. A. Hax & Company

BALTIMORE, MARYLAND

Established 1880

17 Days' Free Storage on Export Grain

Low Insurance Rate

W. H. Hayward

H. F. Mellier

HAYWARD & CO.

Grain-Flour-Feed
Brokers - Forwarders

Members of
Baltimore Chamber of Commerce
New York Produce Exchange
Grain Dealers National Association

312 Chamber of Commerce

Baltimore, Md.

Baltimore Grain Co.
Receivers & Exporters
Baltimore Maryland

E. H. BEER & CO., INC.

Successors to

Chas. England & Co., Inc.

GRAIN—HAY—SEEDS
Commission Merchants

308-310 Chamber of Commerce, Baltimore

LET

the advertiser
in on the se-
cret and tell
him you saw
it in the

**Grain
Dealers
Journal**

Use Universal Code

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them.

ATCHISON, KANS.

Blair Elevator Corp., The, grain merchants.*

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Lederer Bros., grain receivers.*
Steen & Bro., E., grain receivers and exporters.*

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BLUFFTON, IND.

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Seymour-Wood Grain Co., consignments.*
Sunset Grain & Feed Co., grain and feed.*
Townsend Ward Co., The, consignments.*
Watkins Grain Co., grain commission.

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McKenna & Dickey, commission merchants.*
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Thomson-McKinnon, members leading exchanges.

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DeMole Grain Co., receivers and shippers.
Early & Daniel Co., grain, hay, feed.*
Scholl Grain Co., receivers and shippers.*

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Cook, Wade H., grain, hay and grain products.*
*Members Grain Dealers National Association.

CLEVELAND, O.

Grain & Hay Exchange Members.

Bailey, E. I., shpr. grain, millfeed, oil and c. s. meal.*
Cleveland Grain & Milling Co., The, recvrs. & shprs.*
Sheets Elevator Co., The, grain, hay, straw.*
Shepard, Clark & Co., grain merchants.*

COLUMBUS, O.

Smith-Sayles Grain Co., The, buyers and shippers.*

DAVENPORT, IA.

Davenport Elevator Co., receivers and shippers.*

DECATUR, ILL.

Baldwin & Co., H. I., grain dealers.*
Harrison, Ward & Co., grain Belt Elevator.*

DENVER, COLO.

Grain Exchange Members.

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Conley-Ross Grain Co., The, grain and beans.*
Denver Elevator, wholesale grain, flour, millfeed.
Kellogg Grain Co., O. M., receivers and shippers.
Farmers Union M. & E. Co., millers, grain mchts.
Phelps Grain Co., T. D., wholesale grain.*
Rocky Mountain Grain Co., export and domestic grain.*
Summit Grain Co., The, wheat, corn, oats, rye, barley.*

DES MOINES, IA.

Board of Trade Members.

Lockwood, Lee, broker.

DETROIT, MICH.

Board of Trade Members.

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Lapham & Co., J. S., grain dealers.*
Lichtenberg & Son, oats, corn, hay, straw.*
Simmons & Co., F. J., grain and hay.*

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Board of Trade Members.

White Grain Co., receivers and shippers.*

EMPORIA, KANS.

Trusler Grain Co., grain merchants.

FORT DODGE, IOWA.

Christensen, George, grain broker.

FORT WORTH, TEX.

Grain and Cotton Exchange Members.

Dorsey Grain Co., merchants—commission consignments.
Ft. Worth Elevators Co., gr. merchants, pub. storage.
Gladney-Muchmore Grain Co., recvrs., shprs., consignmts.
Grain Marketing Co., grain merchants.
Moore-Seaver Grain Co., recvrs., shprs., consignments.*
Rogers Co., E. M., strictly bkg. and consignments.*
Transit Grain & Com. Co., consignments, brokerage.*
Universal Mills, "Superior Feeds."

GALVESTON, TEX.

Texas Star Flour Mills, flour and corn millers, exptres.

GREENVILLE, O.

Grubbs Grain Co., E. A., track buyers.*

HOUSTON, TEX.

Gulf Grain Co., grain, hay, millfeed.
Rothschild Co., S., grain, c/s products, rice, b/p.*

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Board of Trade Members.

Central Grain & Laboratories Co., The, recvrs.-shprs.
Collingwood-Moore Grain Co., receivers and shippers.
Cano Grain Co., wheat, corn, sorghums.
Hutchinson Grain Co., mill orders.
McReynolds, A. G., grain merchant.
Southwest Grain Co., consignments, country run grain.

KANKAKEE, ILL.

Breckenridge Grain Co., grain dealers.

INDIANAPOLIS, IND.

Board of Trade Members.

Bingham Grain Co., The, receivers and shippers.*
Boyd Grain Co., Bert A., strictly brokerage & com.*
Cleveland Grain & Milling Co., grain commission.*
Hart-Maibucher Co., grain merchants.*
Hayward-Rich Grain Co., grain commission.*
Kinney Grain Co., H. E., receivers and shippers.*
Montgomery & Tompkins, receivers and shippers.*
Steinhart Grain Co., commission and brokerage.*
Witt, Frank A., grain commission and brokerage.

KANSAS CITY, MO.

Board of Trade Members.

Bruce Bros. Grain Co., consignments.
Christopher & Co., B. C., kafir, feterita, milo.*
Davis Grain Co., A. C., grain commission.
Denton Hart Grain Co., consignments.*
Ernst Davis Grain Co., commissions.
Hipple Grain Co., milo-kaffir.
Lichtig & Co., H., kafir, milo, screenings.
Logan Bros. Grain Co., receivers and shippers.*
Miller Grain Co., S. H., consignments.
Moore-Seaver Grain Co., grain receivers.*
Norris Grain Co., grain merchants and exporters.*
Rocky Mt. Grain & Com. Co., consignments.*
Scular Bishop Grain Co., receivers and shippers.*
Shannon Grain Co., consignments.
Thresher Grain Co., R. J., grain commission.*
Updike Grain Corp., consignments.
Vanderslice-Lynds Co., commission.*
Wilser Grain Co., consignments.*

LEAVENWORTH, KANS.

Cranston-Liggett Gr. & Feed Co., corn, mixed feed.

LITTLE ROCK, ARK.

Grain Exchange Members.

Farmer Co., E. L., brokers, grain and millfeed.*
Gordy Co., C. L., grain brok., hay, grain and millfeed.

LOUISVILLE, KY.

Board of Trade Members.

Callahan & Sons, receivers and shippers of grain.*
Bingham-Hewett Grain Co., recvrs., shippers of grain.*
Kentucky Public Elevator Co., stores and shippers.*
Zorn & Co., S., receivers and shippers.*

LYNCHBURG, VA.

Moon-Taylor Co., grain and hay brokers.

McKINNEY, TEX.

Reinhardt & Co., wheat, corn, oats, maize.*

MEMPHIS, TENN.

Merchants Exchange Members.

Browne, Walter M., broker and com., consignments.*
Buxton, E. E., broker and commission merchant.*
U. S. Feed Co., grain, hay, millfeed.*

MIDDLETOWN, CONN.

Meech & Stoddard, Inc., grain, feed, hay, flour.*

MILWAUKEE, WIS.

Chamber of Commerce Members.

Franko Grain Co., The, grain and feed.
Froedtert Grain & Mailing Co., recvrs. and shippers.*
Kamm Co., P. C., grain shippers.*
LaBude Feed & Grain Co., grain, feed, hay.*
Milwaukee Grain Com. Co., recvrs., grain and seed.

MINNEAPOLIS, MINN.

Chamber of Commerce Members.

Cargill Commission Co., grain commission.*
Cereal Grading Co., grain merchants.*
Davies Co., F. M., grain commission.*
Delmar Co., shippers.
Itasca Elevator Co., grain merchants.
Malmquist & Co., C. A., receivers and shippers.*
Marfield Grain Co., grain commission.*
Sheffield Elevator Co., shippers of grain.*
Stuhr-Seidl, shippers grain and feed.
Van Dusen-Harrington Co., grain merchants.*
Zimmerman, Otto A., grain and feed.*

(Continued on next page.)

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

NASHVILLE, TENN.

McKay-Reece Co., wholesale seeds & grain.

NEW CASTLE, PA.

Hamilton Co., grain, feed, flour, hay, buckwheat.*

NEW YORK CITY.

Produce Exchange Members.

Abel, Joseph A., grain broker.
Jones & Co., M. B., buyers—quote us.*
Knight & Co., grain brokers.
Therrien, A. F., broker.

OKLAHOMA CITY, OKLA.

Grain Exchange Members.

Grain Marketing Co., milling wheat specialists.
Hardeman-King Co., millers, grain dealers.*
Marshall Grain Co., grain, feed, seeds.*
McManus Gr. & Feed Co., W. F., wh., corn, oats, mfeed.
Okla. City Mill & Elevtr. Co., millers, gr. dealers.*
Perkins Grain Co., W. L., strictly brokerage.
Scannell Grain Co., E. M., grain and feed.
Stinnett Grain Co., grain merchants.*
Vandenburgh, Jesse, milling wheat.

OMAHA, NEBR.

Grain Exchange Members.

Crowell Elevator Co., receivers, shippers.*
Roberts Grain Co., Geo. A., consignments.*
Stockham Grain Co., E., commission merchants.*
Taylor Grain Co., brokers.*
Trans-Mississippi Grain Co., receivers and shippers.*
United Grain Co., commission and brokerage.*
Udike Grain Co., milling wheat.*

PEORIA, ILL.

Board of Trade Members.

Oole Grain Co., Geo. W., receivers and shippers.*
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*
Turner Hudnut Co., receivers and shippers.*
Tyng Grain Company, receivers and shippers.*

PHILADELPHIA, PA.

Commercial Exchange Members.

Richardson Bros., grain, flour, millfeeds.*
Richardson, Geo. M., grain and feeds.*
Stites, A. Judson, grain and millfeed.*

PITTSBURGH, PA.

Members Grain and Hay Exchange.

Hardman & Daker, grain, hay, millfeed.*
Harper Grain Co., corn a specialty.*
McCague, Ltd., R. S., grain, hay.*
Rogers & Co., Geo. E., grain and hay.*
Stewart & Co., Jesse C., grain and mill feed.*

PONTIAC, ILL.

Balbach, Paul A., grain buyer, all markets.

RICHMOND, VA.

Grain Exchange Members.

Morriss & Co., C. F., grain, feed, hay, flour brokers.*

ST. JOSEPH, MO.

Grain Exchange Members.

A. J. Elevator Co., The, wheat, corn, oats.*
Gordon Grain Co., grain commission.*
Niedorp Grain Co., buyers-sellers of corn.*

SAN ANTONIO, TEX.

King, Douglas W., wheat, corn-bro., Texas R. Oats.*

ST. LOUIS, MO.

Merchants Exchange Members.

Dreyer Commission Co., feedstuffs, grain, seeds.*
Graham & Martin Grain Co., grain commission.*
Hall Grain Co., Marshall, grain merchants.*
Hunter-Robinson Mfg. & Gr. Co., grain, feedstuffs.*
Langenberg Bros. Grain Co., grain commission.*
Martin & Knowlton Grain Co., grain merchants.*
Morton & Co., grain commission.*
Nanson Commission Co., grain commission.*

ST. LOUIS, MO. (Continued.)

Picker & Beardsley Com. Co., grain and grass seed.*
Powell & O'Rourke Grain Co., buyers-sellers corn.*
Turner Grain Co., grain commission.*
Von Rump Grain Co., grain merchants.*

SALT LAKE CITY, UTAH.

Nelson Co., Sterling H., whlse. grain, hay, mill feeds.

SIDNEY, OHIO.

Custenborder & Co., E. T., buyers-sellers grain.*
Wells Co., The J. E., wholesale grain.*

SIoux CITY, IA.

Board of Trade Members.

Button Co., L. C., grain commission.*
Western Terminal Elevator Co., receivers and shippers.*

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De Vore & Co., H. W., grain and seeds.*
King & Co., C. A., grain and seeds.*
Southworth & Co., grain and seeds.*
Wickenhiser & Co., John, grain receivers, shippers.*
Zahn & Co., J. F., grain and seeds.*

TOPEKA, KANS.

Derby Grain Co., wheat, corn, oats, and millfeed.*

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Bedell Elevator Co., milling wheat.
Beyer Grain Co., grain merchants.*
Blood Grain Co., I. D., receivers and shippers.
Harold Grain Co., J. R., consignments, mill orders.
Smith McLinden Grain Co., wheat, corn, kafir, millfeed.
Simonds-Shields-Lonsdale Co., receivers and shippers.
Stevens Scott Grain Co., receivers and shippers.
Wallingford Bros., milling and export wheat.*
Wichita Terminal Elevtr. Co., general grain and elvtr.*

WICHITA FALLS, TEX.

Mytinger Mfg. & Grain Co., grain, feed, seeds.*

WINCHESTER, IND.

Goodrich Bros. Hay & Grain Co., Whlrs. gr. and seeds.*

* Member Grain Dealers National Association.

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Elevators: Denver, Cheyenne Wells and Arapahoe, Colo.

O. M. Kellogg Grain Co.
Receivers shippers o all kinds of grain.

Farmers Union Mlg. & Elev. Co.
Millers and Grain Merchants.
38th and Wynkoop Sts.

The Conley-Ross Grain Co.
Wholesale Grain.

The Ady & Crowe Mercantile Co.
Grain, Hay, Beans.

Rocky Mountain Grain Co.
Grain Merchants—Export and Domestic.

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Wholesale Grain, Flour, Mill, Feed and Pinto Beans.
We operate 30 elevators in eastern Colorado.

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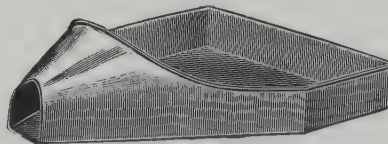
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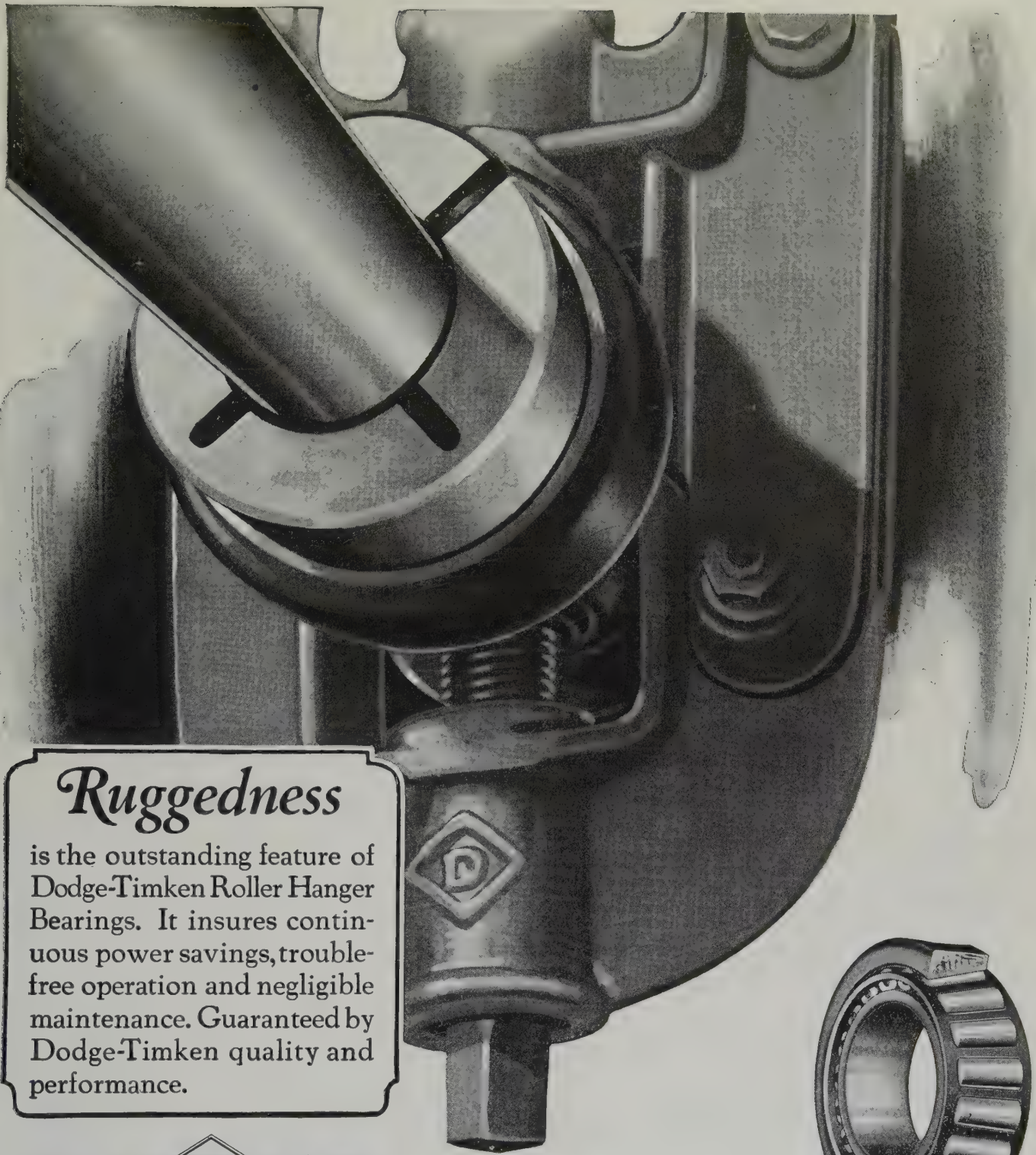
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Incorporated - 1910

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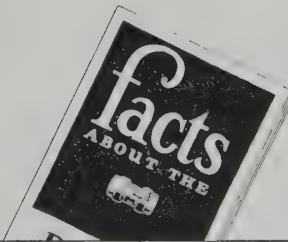
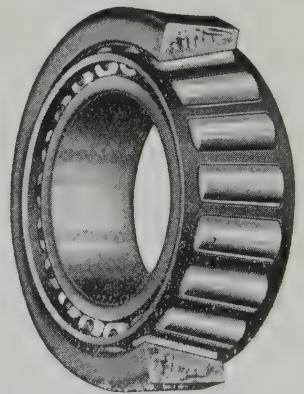


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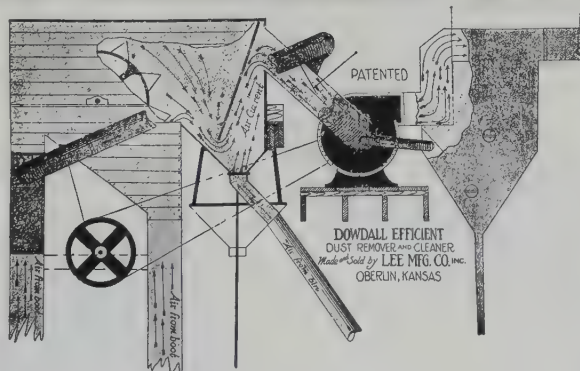
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The superiority of American High Speed Chain Drive for use in elevators lies in the elimination of static, dust, friction, and slipping. American High Speed Chains transit 98 to 99% of the power applied, and run silently, without initial tension.

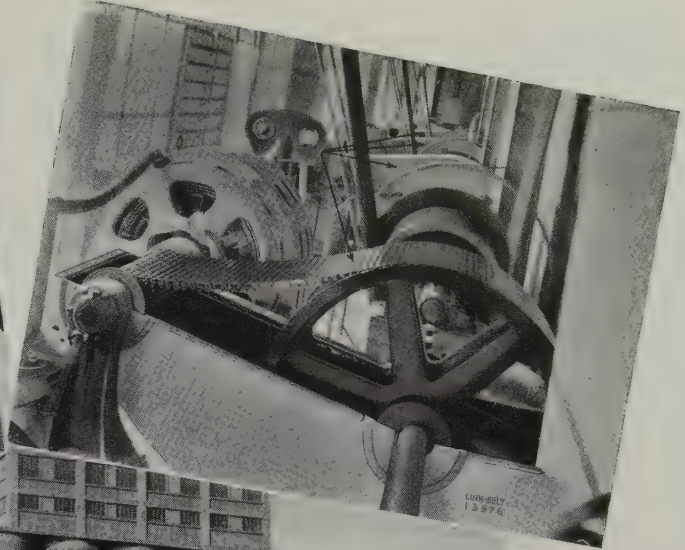
Make your elevator safer and more efficient by replacing slipping belts and grinding gears with American High Speed Chains.

A wire or a letter from you will bring an engineer to talk over your problems—at no obligation.

AMERICAN
HIGH SPEED CHAIN CO.
INDIANAPOLIS, U. S. A.



Link-Belt
Silent Chain
Drive
operating
Screw
Conveyor



5 - 200 H. P.
Link-Belt
Silent Chain
Drives
operating
Legs



Exterior of
Norfolk
Municipal
Elevator

Norfolk Municipal Elevator Transmits 2025 H. P. Thru Link-Belt Silent Chain



TO DRIVE the equipment of the Norfolk Municipal Elevator with maximum efficiency and reliability, and with full assurance of protection from dangerous sparks, 36 Link-Belt Silent Chain Drives transmit a total of 2,025 H. P.

These drives range from 7½ to 200 H. P. All of them are encased in Link-Belt dust-proof and oil-retaining casings, insuring proper lubrication, and protection from

dust. Long life of each drive, and minimum of attention, are therefore guaranteed.

Some of the advantages of the Link-Belt Silent Chain Drive which makes it the standard drive in modern elevators are: its positive action, transmitting power at a sustained efficiency of 98.2%; its flexibility which protects the motor and reduces journal friction to the minimum, and its long years of faithful service. Send for Link-Belt Silent Chain Price List Data Book No. 125.

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Leading manufacturers of Elevating, Conveying and Power Transmission Machinery

PHILADELPHIA, 2045 Hunting Park Ave.

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INDIANAPOLIS, P. O. Box 85

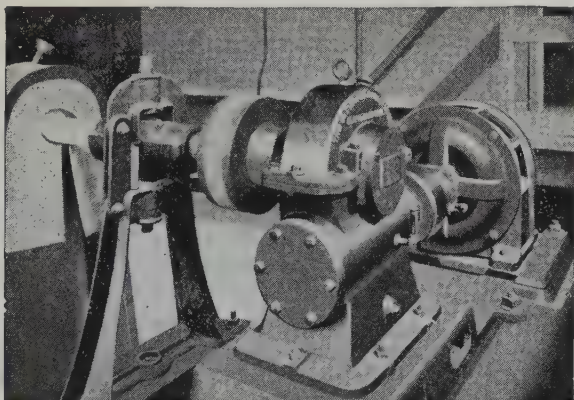
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SILENT CHAIN DRIVES

Cleveland WORM GEAR REDUCTION UNITS

—for Economical
Speed Reduction
in your plant

Elevators, Conveyors, Fans,
and Machines of every kind
can be driven more economi-
cally if you will use Clevelands



*Cleveland Worm Gear Reduction Unit driving
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RPM. Ratio in Worm Drive 9-2/3 to 1.*

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Units are fully enclosed, troubleproof
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of oil. There are only two moving
parts to a Cleveland, the worm and
the gear—this simplicity means long-
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Complete information will be sent
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The Cleveland Worm & Gear Co.

"America's Pioneers in Worm Gearing"

1502 E. 40th St.

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"MAN HOURS"

DECADES have been wasted
sweeping, patching, or renewing
concrete floors and steps.

CENTURIES have been wasted
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wooden floors and steps.

MILLIONS have been wasted
through fire, accident and death
loss; from broken or inflammable
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KERLOW does away with all this.
Write us for the "hows" and "whys."

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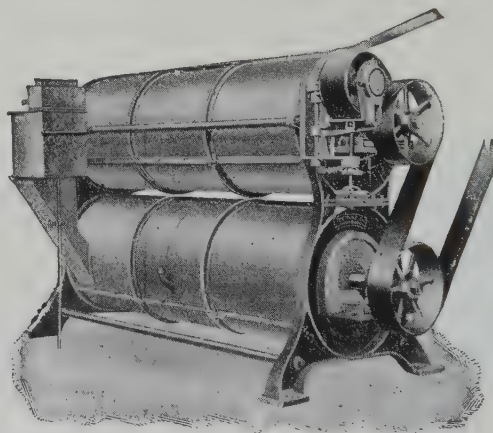
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Non-Slipping

SMUT?

Here's The Remedy



You can

Buy smutty, dirt encrusted wheat.

Sell the same wheat, made absolutely pure and clean.

Profit from this turnover.

But, you can do this only if you are the possessor of a
Wolf-Dawson Wheat Washer and Drier.

This machine stands out alone in the grain cleaning field
by its ability to remove the sticky clinging smut and dirt
from even the smallest crevice of the grain.

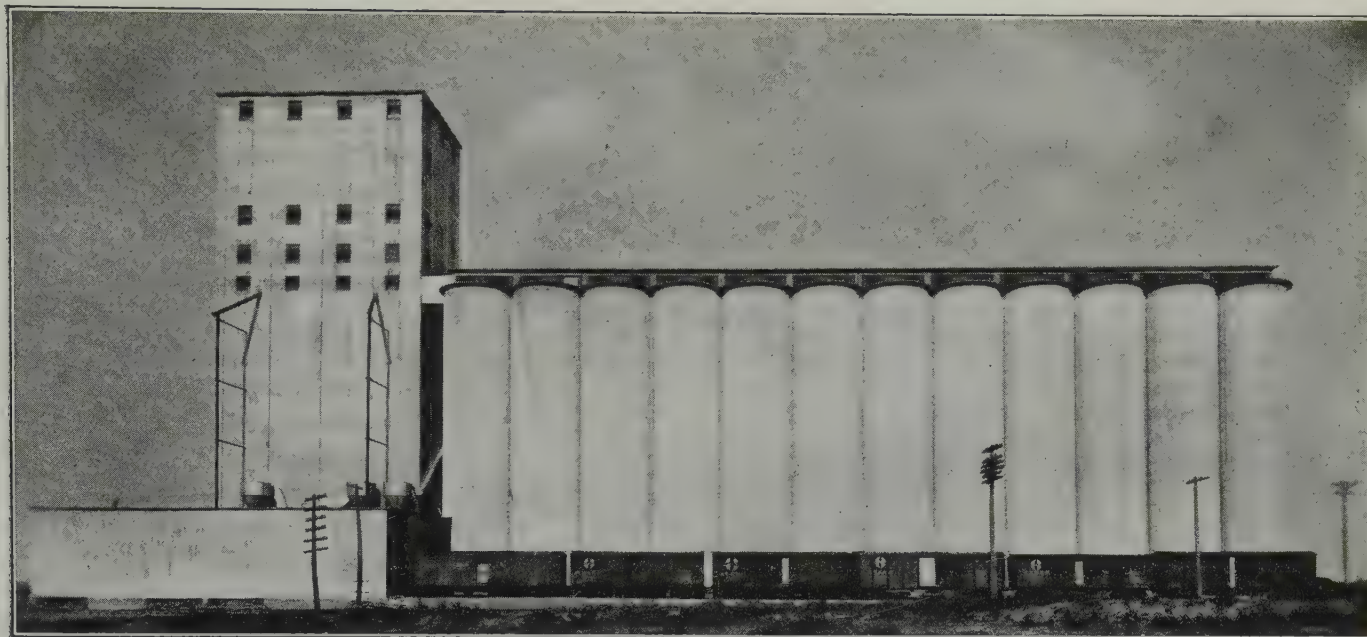
Wheat, after being cleaned and conditioned in the Washer
and Drier, can be shipped or stored without danger of
heating.

THE WOLF COMPANY

CHAMBERSBURG, PA., U. S. A.



"Eureka"—"Invincible" Grain Cleaning Machinery



"Katy" Elevator, Fort Worth Elevators Co., Fort Worth, Tex.

A typical example of modern elevator construction. In this great plant, one of the finest in the Southwest and the pride of Mr. Jule G. Smith, the genius back of the project, there is a very complete installation of "Eureka" Grain Cleaners: Two 5000 bushel "Eureka" Elevator Separators, a 1500 bushel "Eureka" Oat Clipper and three "Eureka" Dust Collectors.

Mr. Smith himself specified the ultra-refined mechanical details of these machines.

"Eureka" and "Invincible" Grain Cleaners

are giving a full measure of satisfaction to thousands of elevator owners. An organization which has served so many prominent concerns for so many years, is almost sure to have something which should be of value to you.

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INVINCIBLE GRAIN CLEANER CO. SILVER CREEK, N.Y.



"EUREKA" - "INVINCIBLE" GRAIN CLEANING MACHINERY

European Branch: 64 Mark Lane, London, E. C. 3, England

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Silica-Graphite

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gives better protection for all exposed metal or wood work at lowest cost per year.

The pigment, silica-graphite, provides a tough yet elastic, film that expands and contracts with heat and cold without cracking or peeling. The vehicle is pure boiled linseed oil—the best paint vehicle known.

Many users of Dixon's Paint have certified to its long service records of from five to ten years and even more.

Dixon's Red Lead-Graphite Primer is recommended for priming coats.

Write now for Booklet 15B and learn how to reduce paint costs.

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Jersey City, N. J.

Established 1827



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Elevator Buckets



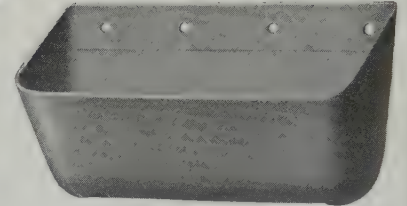
"V" Type

A bucket for high speed and perfect discharge



"Salem"

Weller Buckets are well made and will give the service



We Also Make

Buffalo Favorite and Rialto Buckets

and a Complete Line of

Grain Handling Equipment

Write for prices

WELLER MFG. CO.

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Plants
B. & O. Elevator
Baltimore
J. C. Hunt Grain Co.
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We have equipped 75% of the terminal elevators built or equipped during the last 20 years in the U. S. and Canada. You can profit by this experience.

Write us for particulars.

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A Book of Tables for Finding the Cost of Any Number of Pounds of Wheat, Alfalfa Seed, Peas or Potatoes at Any Market Value Per Bushel of 60 lbs. at all prices from 50 Cents to \$2.39 Per Bushel. The pounds are also reduced to bushels on each page.

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The pounds column is printed in red, the bushels and dollars and cents columns in black, and each group of figures is divided by red rules to facilitate the calculation. No other book of tables will give you these values so quickly. They will save you many hours of needless figuring. Compact, convenient and dependable.

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Grain Dealers Journal

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TRIAL. Freight both ways paid by us if you don't find it worth the price and then some.

Get it from your dealer

The New Badger
ADVANCE
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Look for the word
"New Badger"—it
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Do You Have a Pit or Basement that is Medusa Waterproofed?

THERE are many elevators throughout the country whose pits are protected with Medusa Waterproofing. Some monolithic ones are waterproofed entire with Medusa.

Some of these elevators have been built eighteen years, while others are only a few years old.

We have no record of most of these jobs and we would like to hear from every man who has used Medusa Waterproofing in constructing his elevator or other buildings. A letter, telling your story com-

pletely, would be of value to us—and as we would use it in advertising material it would have some publicity value for yourself.

Perhaps you have *built* elevators and used Medusa Waterproofing. If you have, a letter telling about your work will be just as welcome as the letter from the owner.

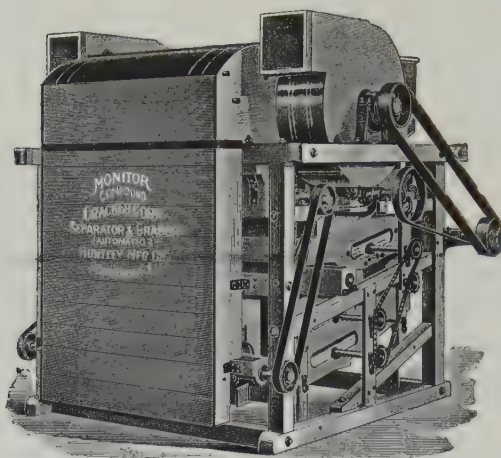
If you cannot furnish a picture we will gladly have one taken, giving you a print for your own use.

The Sandusky Cement Company
Department G J Cleveland

Manufacturers of Medusa Stainless White Cement (Plain and Waterproofed); Medusa Gray Cement (Plain and Waterproofed); and Medusa Waterproofing (Powder or Paste).

MEDUSA
WATERPROOFING
Powder or Paste





Meet the Demand!

That there is a steady demand for graded cracked corn is a settled fact.

If, however, you are retailing instead of manufacturing, you are not getting the possible profits. But by installing a MONITOR Cracked Corn Grader following a Cracker, you can get all of the profits in the business and in addition, the grades delivered by the MONITOR will rapidly increase your trade. Then all of the corn is usable; nothing wasted. You get the meal and the offal for your feed. What better proposition can one ask?

At least, investigate. Send for printed matter.

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NO elevator manager can tell in advance everything he is going to need in repair parts and supplies!

But when the unexpected happens and you need a piece of equipment in a hurry, you'll get it quickly from Strong-Scott. We have it in stock, ready for immediate shipment.

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When Ephraim Crosby made a clearing far out on Valley Road and built his house, he had no neighbors. He lived an independent life, producing on the farm practically all that his family ate and wore. Emergencies—sickness and fire and protection of his homestead from prowlers—he met for himself. Later he had neighbors, one five and another eight miles away. Sometimes he helped them with their planting and harvesting, and they helped him in turn. Produce was marketed in the town, twenty miles along the cart-road.

Today Ephraim Crosby's grandchildren still live in the homestead, farming its many acres. The next house is a good mile away. But the Crosbys of today are not isolated. They neighbor with a nation. They buy and sell in the far city as well as in the county-seat. They have at their call the assistance and services of men in Chicago or New York, as well as men on the next farm.

Stretching from the Crosbys' farm living-room are telephone wires that lead to every part of the nation. Though they live in the distant countryside, the Crosbys enjoy the benefits of national telephone service as wholly as does the city dweller. The plan and organization of the Bell System has extended the facilities of the telephone to all types of people. By producing a telephone service superior to any in the world at a cost within the reach of all to pay, the Bell System has made America a nation of neighbors.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

BELL SYSTEM

One Policy, One System, Universal Service

Receiving and Stock Book

Form 321 is designed for keeping a record of each kind of grain received at a country elevator in a separate column so that the buyer by adding up columns may quickly determine the number of bushels of each kind of grain on hand. Columns are also provided for date, name, gross, tare, net pounds, price, amount paid and remarks.

The book is printed on Linen Ledger paper, well bound with keratol back and corners. Each of its 160 pages is 9x12 inches, giving room for recording 3200 wagon loads. Weight 2 lbs. 5 oz. Price \$3.00.

Grain Dealers Journal 309 South La Salle St., Chicago, Ill.



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If you are having trouble in dumping long coupled wagons or trucks on your regular type of dump or if you are counting on making any changes in your driveway or sinks investigate this dump, as we believe it will come the nearest filling all requirements in the most practical and economical way, in cost of installing, ease of operation, and amount of power used.

One device will take the place of three or four and will handle any length or kind of vehicle regardless of their capacity.

There are no delicate or short lived parts.

There are no parts to leak or freeze.

Write for circulars and description.

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It takes only a spark

—Only a spark to wreck the labor of months, only the click of steel on steel to destroy millions of dollars worth of life and property.

Tramp iron has many times been the cause of complete destruction—and tramp iron is sure to turn up in grain.

The cost of protection is so small. Keep it out with Dings High Intensity Magnetic Separator. Not a particle can escape. Get the Dings free bulletin.

Dings Magnetic Separator Co.
642 Smith St. Milwaukee, Wis.

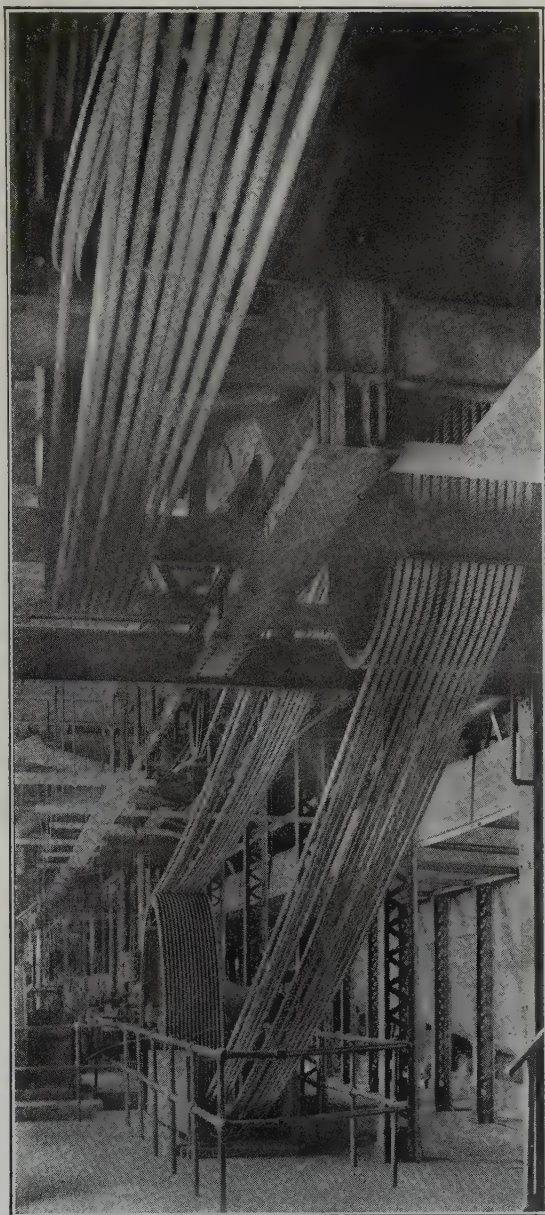
Dings "High Intensity"
Magnetic Separators

For whatever you wish to know about equipment or supplies used in or about a grain elevator ask the

Information Bureau

Grain Dealers Journal Chicago, Ill.

Transmitting Power Economically

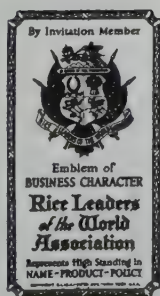


If you could be shown that a Rope drive is less expensive to maintain than your present drive, (if it is not rope) you would undoubtedly take immediate steps to install one.

Think of the room that is taken up with your various belts and pulleys. Only from 1/2 to 2/3 of that space would be necessary for the satisfactory operation of a Rope drive. You are therefore saving a great deal of valuable space.

Other features, such as the transmission of power around angles, steadiness and lack of slippage, found paramount in a Rope drive, all make for economy.

Lower your operating costs by installing a Rope drive and insist upon Columbian, the Guaranteed Transmission Rope. You can tell it by the outside red, white and blue yarns and the Columbian *Tape-Marker* which extends in one strand throughout the entire length of the rope.



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GRAIN ELEVATOR BUILDERS

Some supposed to be elevator *engineers* will tell you a concrete pit cannot be made water proof.

Would you buy an automobile of a vintage of ten years ago??????

Think this over when looking over plans.

Younglove Construction Co.
Sioux City, Iowa

We build concrete pits that ARE water proof.

BLOOMINGTON CONST. CO.
Bloomington, Ill.
Engineers and Contractors of
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BROOMS—Extra heavy (45 lb.) warehouse brooms \$12.00 per doz., Minneapolis.

Extensively Used by U. S. Dept. of Agriculture, Federal and State Grain Inspection Departments, Grain Trade, etc.

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Used in Moisture Testing

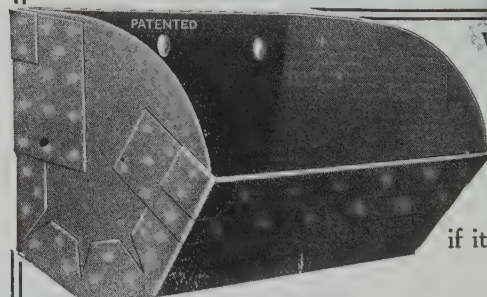
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Bolt A Business Boom Onto Your Belts!

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by Using Superior Elevator
CUPS!



Would your elevators handle a sudden boom in your business if it should come?

They would, if equipped with Superior Elevator Cups, because:

- 1 They will handle more than your present cups, without change of spacing, or of speed.
- 2 They will handle from one to three times more than your present cups, if you change the spacing, and speed up a little.

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No order too large for us to handle;
None too small for us to appreciate.

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RELIANCE Construction Co.

Board of Trade
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Designers and Constructors
of the better class of grain
elevators—concrete or wood.

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The Star Engineering Company

Specialists in
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Our elevators stand every test,
Appearance, Strength, Durability
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Estimates and information promptly furnished

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cause the loss of many hard earned
dollars to shippers of grain and seed.

MUCH OF THIS LOSS can be saved
by the use of Kennedy Car Liners.
These car liners practically condition
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shippers to load cars that otherwise
would be rejected.

KENNEDY SYSTEM of car liners
prevents leakage in transit and are
made for all cases of bad order
cars, consisting of full Standard
Liners, End Liners and Door Liners.

WILL YOU NOT give us an opportunity
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system and the low cost for this
protection? We are confident this
would demonstrate to you the efficiency
and money saving merits of
our car liners.

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Put Your Name

where every progressive
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and keep it there.

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The Grain Dealers Journal

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is the mark designating the best in Grain
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Any Size or Capacity
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Preliminary Sketches and Estimates,
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Are now using

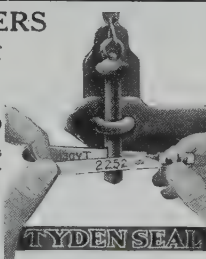
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Bearing shipper's
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Prevent
CLAIM LOSSES
Write for samples
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GRINDERS**

It PAYS to GRIND ALL GRAINS

Look to the Grinders. They do the
work! Bowsher's Cone-Shape
grinders are the correct principle
in Feed Mill construction. They
mean larger grinding surface
close to center of shaft; thus More
Capacity, Lighter Draft, Longer Life.

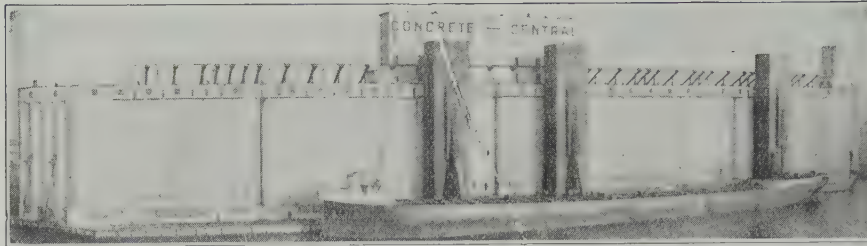
"Desire to express my appreciation
of the long-lasting, trouble-proof
Bowsher. Have used a No. 4 ten years
with less than One Dollar per year for
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10 sizes; 2 to 25 H. P. Write
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N. P. BOWSHER CO., SOUTH BEND, IND.

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in this number of the GRAIN DEALERS JOURNAL are especially interesting.
After you have read them, consider carefully whether you are not better off with
the twenty-four numbers of the Journal, on your desk, or the \$2.00 in your pocket.

Operated by
The Eastern Grain,
Milland Elevator
Corporation



Concrete-Central
Elevator, Buffalo, N.Y.
Capacity
4,500,000 Bushels

Designed and Built by
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Buffalo, N. Y.

The Most Modern Elevator in the World

This is an aeroplane view of the Pennsylvania Railroad Company's new Northern Central Elevator No. 3, located at Canton, Baltimore, Maryland, capacity 5,000,000 bushels. This elevator is equipped with

Four Stewart Link-Belt Grain Car Unloaders

*Every day in every way we are designing and building better and better Grain Elevators.
We have built for many of your friends—Eventually we will build for you
Why not now?*



James Stewart & Co., Inc.

Designers and Builders
GRAIN ELEVATORS
In All Parts of the World
Grain Elevator Dept., W. R. Sinks, Manager
1210 Fisher Building, Chicago, Ill.



One of a Group of Elevators

Built by us at Port Arthur. The group includes elevators for

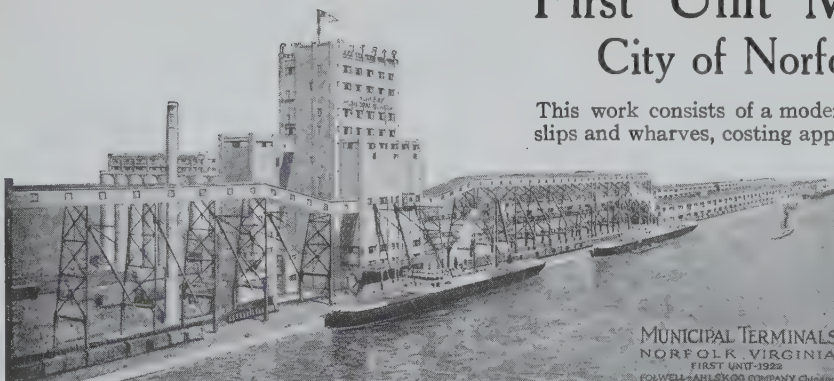
The James Richardson & Sons, Limited.
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Designers and Builders of GRAIN ELEVATORS
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2,000,000 Bushel Elevator
3,000 bbl. Flour Mill
Office Building
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Warehouses
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550,000-bushel grain elevator, special design of bin arrangement to facilitate storage and handling of a variety of grains of different grades. Additional storage of 250,000 now under construction.

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Grain Elevators—Flour and Feed Mills

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Highest quality for bleaching grains. Guaranteed 99.5% pure and entirely free from arsenic. Quick shipment from mines or nearby stocks.

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Wagon Loads Received

A book for the use of country grain buyers in keeping a record of grain received from farmers. Some dealers record oats receipts in front and corn receipts in the back of book; others use a separate book for each kind of grain.

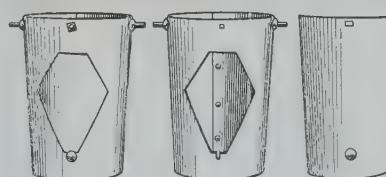
Its column headings are: Month, Day, Name, Kind, Gross and Tare, Net Pounds, Bushels, Pounds, Price, Dollars, Cents and Remarks.

The book is 9½x12 inches, 200 pages, 20 lines to each page, giving room for recording 4,000 loads, printed on Linen Ledger Paper and is well bound in strong board covers with leather back and corners. Order Form 380. Price, \$3.00

GRAIN DEALERS JOURNAL

309 South La Salle St., CHICAGO, ILL.

Kewanee RENEWABLE BOTTOM Grain Spout



With a pair of plyers you can instantly slip in a new Kewanee bottom—made from tough, special analysis steel. A square shouldered bolt with a square hole in the renewable bottom, prevents the nut from turning. This bolt, and a large oval-headed rivet that slips into a slot holds the bottom firmly in place. The grain cannot wear off the rivet for the hole in the bottom is countersunk and the rivet is then beaded into it.

Don't discard entire spouts, or sections because of small holes. Use a Kewanee Renewable Bottom Spout and when the bottom wears simply slip in a new one which costs only about 37½ cents for the 8" size and smaller. A Kewanee costs a little more than ordinary spouts but outwears a dozen of them.

Order One on Trial

We will ship you a Kewanee Grain Spout. Use it a month, six months—a year. If you're not satisfied return it and we will refund your money. All we need know is the outside diameter, or outside rectangular measurements of your down spout, and length of spout wanted.

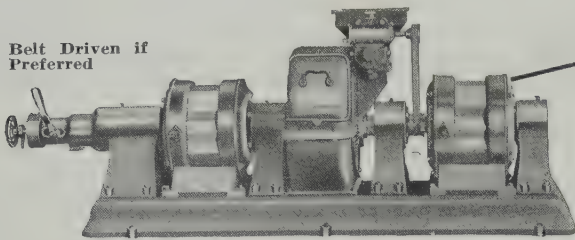
Kewanee Implement Company

343 Commercial St.
KEWANEE, ILLINOIS

Your Copy of this New MONARCH Book is Ready

An efficient feed grinder is becoming a necessary portion of the equipment of the modern grain elevator at the country station. This book explains in detail the

Belt Driven if Preferred



Monarch Ball Bearing Attrition Mill

We will gladly send it to you and explain how other elevators are building up a profitable feed grinding business. Just ask for Booklet I-10.

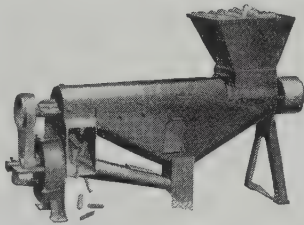


SPROUT, WALDRON & CO., 1202 Sherman St., MUNCY, PA.

Chicago Office: 830, 9 South Clinton Street

Kansas City Office: 612 New England Building

THE MONARCH MILL BUILDERS



USE IT FOR YEARS

The usefulness of TRIUMPH Corn Shellers is measured by decades, not merely by years. Many have been in use for twenty years, having had only minor repairs and replacements.

Simple and sturdy in construction, easy and always ready to operate, large capacity, and cost little.

It's worth your time to read the descriptive bulletins. Send us your name and address.

THE C.O. BARTLETT & SNOW CO.
Main Office and Works: Cleveland, Ohio

UPKEEP

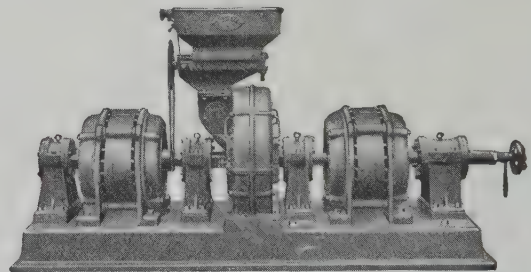
means a lot to some attrition mill owners,—but not to Munson users.

The reason—careful, thorough workmanship and the highest quality of material.

Think what it cost you to run your mill this past year and you will know why

MUNSON ATTRITION MILLS

are more popular every day.

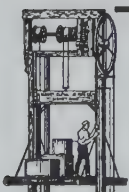


Built by Feed Mill Specialists

Send for Catalog 52 and get acquainted with the Munson—you will like it.

MUNSON MILL MACHINERY Co., Inc.
Established 1825 Utica, N. Y.

Representatives: F. J. Conrad, Cedar Rapids, Ia.; A. F. Ordway & Sons, Beaver Dam, Wis.; Strong-Scott Mfg. Co., Minneapolis, Minn.; A. D. Hughes Co., Wayland, Mich.



SIDNEY AND ELEVATORS MAN LIFTS

They will reduce your handling expense and speed up your work. Easily installed. For quotations give your requirements.
SIDNEY ELEVATOR MFG. CO.
Sidney, Ohio

Cover's Dust Protector

Rubber Protector. \$2.00
Sent postpaid on receipt of price; or on trial to responsible parties. Has automatic valve and fine sponge.
H. S. COVER
Box 404 South Bend, Ind.



AGRICULTURAL GYPSUM

Tell your farmer friends about it! It increases crops. Carries insect poisons, preserves nitrogen in animal and poultry manure, etc. Write today for valuable book—free!

THE GYPSUM INDUSTRIES
Dept. 94 844 Rush Street Chicago

The "HALSTED" HAS NO EQUAL



No Seal Rings
Scientific

Positive Feed
Economical

Wick Oiler Bearings

Its best friend is the man who has used other makes.

Grinding Plates alike on both sides, and being reversible, gives FOUR cutting edges.

Highest efficiency at the smallest expense.

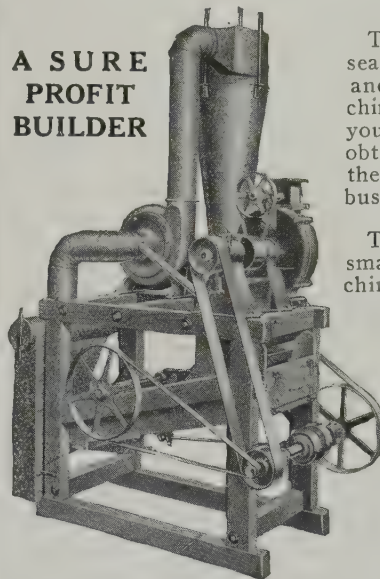
THE ENGELBERG HULLER CO.
SYRACUSE, N. Y., U. S. A.

UNIQUE

COMBINED CRACKER and GRADER

Produces uniform steel cut corn, grades it, and cleans it thoroughly in one operation

**A SURE
PROFIT
BUILDER**



The cracked corn season is coming on and with this machine in your plant you will be able to obtain a share of the profits which this business brings.

The first cost is small and the machine takes up little space in the plant. It is shipped complete, ready to be installed and operated without expense or delay.

*Write us today
for complete
description.*

ROBINSON MFG. CO.

42 Robinson Bldg., Muncy, Pa.

— CHICAGO OFFICE —
111 WEST JACKSON BLVD.



DREADNAUGHT FEED GRINDER

**WELL
KNOWN**

**WELL
LIKED**

IN EVERY COMMUNITY

Our Dreadnaught is bringing 'us lots of business.
Gary, South Dakota Farmers Elev. Co.
We are grinding a sack a minute with our 18" Dreadnaught.

Dawson, Minnesota Dawson Feed Mill Co.
I am convinced now. My Dreadnaught does just as fine work as the double plate mill I set aside.

Laingsburg, Michigan S. Piatt
We are perfectly satisfied with our Dreadnaught.
Wadsworth, Ohio D. H. L. Feed & Supply Co.
My Dreadnaught does good work.

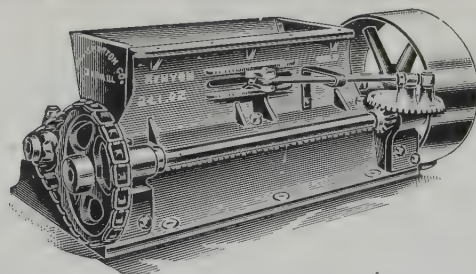
Paxinos, Pennsylvania W. A. Reed
Our three Dreadnaughts are highly satisfactory.
Oakfield, New York G. W. Haxton & Son

We are more than pleased with our Dreadnaught.
Kokomo, Indiana Cloverleaf Mills
Our Dreadnaught is everything you claim for it.

Ellsworth, Wisconsin Jas. Cope & Son

BRYANT ENGINEERING COMPANY
PORT HURON, MICHIGAN

**K
E
N
Y
O
N**



More Than Ever—

will corn be ground, fed, and sold "on the hoof." That means a big business for the man who can grind this corn.

**K E N Y O N
CORN CRUSHER**

shreds the corn—cobs, husks and kernels—to just the right size for your attrition mill. It handles 75 to 100 bushels an hour, regardless of condition—whether it be

*Soft Corn Husked Corn
Hard Corn Snapped Corn*

and horseshoes, bolts, chains or monkey wrenches in the corn do no damage.

Write today for full information and prices, and be prepared to profit by this big business.

Burgess-Norton Mfg. Co.

535 Richards Street

Geneva, Illinois

In the heart of the Corn Country

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

OHIO—Elevator for sale, only one in town; good point, fully equipped. Address Box 163, Sidney, Ohio.

WYOMING—Elevator and feed business for sale; located on Burlington. If interested inquire Eaton Grain Co., Torrington, Wyo.

NORTHERN INDIANA—10,000 bu. iron clad elevator for sale, nearly new, with feed house attached. Lock Box 241, LaGrange, Ind.

FOR SALE—Terminal elevator and Kansas Line. 250,000 bus. at half replacement value payments. Allin, Coffeyville, Kansas.

SOMEBODY'S always hunting an elevator, and there is no wrong time of the year to put an ad in the "Elevator For Sale" columns of the Journal.

NORTHERN ILLINOIS—3 country grain elevators for sale with lumber yard attached. All in good repair. Address 51W2, Grain Dealers Journal, Chicago, Illinois.

6,000 BUSHEL, well equipped elevator for sale, almost new, in small town, one of best farming sections in Missouri. Address 54A8, Grain Dealers Journal, Chicago, Ill.

NORTHERN IOWA elevator for sale, located in very good town with good territory for business. For terms and particulars address 52J8, Grain Dealers Journal, Chicago, Ill.

NEBRASKA—An 18,000 bu. elevator for sale in the best grain point in eastern Nebr. Doing a splendid business, part cash, balance good terms. Reason for selling, age and wish to retire. Address 54A16, Grain Dealers Journal, Chicago, Illinois.

CENTRAL INDIANA—Modern 15,000 bushel elevator doing good business in grain, feed, coal, etc. Terms \$5,000 cash, balance one, two and three years. Might trade for Indianapolis real estate or good central Indiana farm. Address 53Y14, Grain Dealers Journal, Chicago, Ill.

OHIO—A 20,000 bu. elevator, all electrically equipped, together with retail lumber yard and builders' supplies. A feed grinding plant and a splendid line of sidelines with three large warehouses located in the best corn and wheat belt of central Ohio. Address 53Z3, Grain Dealers Journal, Chicago, Ill.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

ELEVATOR AT AUCTION.

BYRON, ILL.—22,000 bushel, round vitrified tile elevator, coal sheds and complete modern equipment to be sold at auction on Saturday, January 31, 1925. Located on C. G. W. R. R. in good Stock, Grain and Dairy district of Illinois. Population 1,000. For particulars address Ray Barrick, Sec., Farmers Grain Company, Byron, Illinois.

ELEVATORS FOR SALE.

CENTRAL INDIANA—Elevator for sale. Priced right, location considered. Address 53V29, Grain Dealers Journal, Chicago, Ill.

NORTHWEST IOWA—Elevator for sale; large volume; favorable competition; owner retiring. Cash only. Address 54A1, Grain Dealers Journal, Chicago, Illinois.

KANSAS—11,000 bu. capacity elevator for sale and a modern home; located in best Wheat Belt in Kansas. Price \$12,000. Address 53Z11, Grain Dealers Journal, Chicago, Ill.

EASTERN NEBRASKA—Several elevators and lumber yards for sale; well located. These are choice properties. If interested write 53X21, Grain Dealers Journal, Chicago, Ill.

NORTHERN KANSAS—Two elevators for sale on main line Rock Island; located in first class alfalfa, corn and wheat section. Address 53Y17, Grain Dealers Journal, Chicago, Ill.

NORTHWEST IOWA—Two grain elevators, 15 and 20 thousand bu. capacity for sale. Located at good grain points in the heart of the corn country. Plymouth Mfg. Co., LeMars, Ia.

CHOOSE YOUR ELEVATOR from the many offered. Insert an advertisement in the "Elevators Wanted" columns of the Grain Dealers Journal, and select one at a satisfactory price and station.

INDIANA—Well located elevator for sale in good city of 10,000, in heart of best farming district in Indiana. Good reason for selling and low price. Address 53Q31, Grain Dealers Journal, Chicago, Illinois.

BARGAIN Grain Elevator with Coal and Feed trade located best Wisconsin territory; electric power; drying machinery; 125,000 bu. fireproof storage; transit rates to all markets; terms. Address A. J. Pick, West Bend, Wis.

IOWA—25,000-bu. cribbed elevator for sale; well equipped with machinery. Good competition and handle 225,000 to 275,000 bus. yearly. Big oat and fair corn crop. Address 53X19, Grain Dealers Journal, Chicago, Ill.

CENTRAL ILLINOIS—15,000 bu. elevator for sale; on private ground; electric equipment; located on I. C. R. R.; best grain country. Price right; can make terms; possession at once. Write 53R5, Grain Dealers Journal, Chicago, Ill.

BARGAIN IF TAKEN AT ONCE—Someone is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property; to enlarge your present interests, or embark in the grain business USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

ELEVATOR FOR LEASE.

SOUTH DAKOTA—My grain elevator at Corsico in good grain territory for lease. Address 53Y11, Grain Dealers Journal, Chicago, Ill.

ELEVATOR BROKERS.

ALWAYS HAVE grain elevators for sale. J. M. Maguire, 6440 Minerva Ave., Chicago, Ill.

ELEVATORS WANTED.

CHOICE 320 ACRE Minnesota Farm to exchange for elevator in Iowa, Illinois or Minnesota. Address M. F. Green, 1441 Bever Ave., Cedar Rapids, Iowa.

WANT TO BUY ELEVATOR with flour, feed, coal, seed and grinding business in Wisconsin. Will consider a responsible position if wages are satisfactory. Address 53X1, Grain Dealers Journal, Chicago, Ill.

WANT ELEVATOR Western two-thirds Kansas or Okla., A. T. S. F. or U. P. Must be good wheat point. Complete description house, territory, location, competition and price first letter. Address 54A23, Grain Dealers Journal, Chicago, Ill.

WANT TO TRADE 156 acres farm for elevator and feed business, located in Northern Missouri preferred. Farm well improved, one-half mile from good town, good churches and schools of different denominations. Address 54A6, Grain Dealers Journal, Chicago, Ill.

FOR RENT.

OUR PLANT which we operated as a feed store for 40 years and until October 1st, 1924. 1923 sales \$175,000.00. Address Conklin & Cummins, Goshen, New York.

BUSINESS OPPORTUNITIES.

WANT TO HEAR from owner having elevator or other business for sale. State cash price and particulars. Address John J. Black, 57th Street, Chippewa Falls, Wisconsin.

WANT TO RETIRE from mercantile business. Successful for twenty-five years. No cleaner stock in eastern Iowa. Profitable and going business. Stock \$15,000 to \$20,000. Opportunity for right man. Traders or speculators need not answer. Might be interested in farm or elevator property.

F. MUELLER & SON, Calamus, Iowa.

ELEVATORS AND MILLS FOR SALE.

OHIO—RECEIVER'S SALE. 5 grain elevators and 1 corn meal mill, known as the "Heffner Mill," and one flour and meal mill, known as the "Crites Mill," situated in Circleville, Ohio, and vicinity, together with cetrain brands and the good will of said mills respectively, will be offered for sale by order of Court, by the Receivers of The Dixie Mills Co., at public auction at the door of the Court House in Circleville, on Thursday, January 29th, 1925, at 1 P. M. Opportunity of a lifetime to acquire valuable milling and elevator properties cheap. Full particulars will be furnished upon request. Address Chas. Gerhardt and Edwin C. Wright, Receivers of the Dixie Mills Co., Circleville, Ohio.

MILL FOR SALE.

COLORADO MILL AT GREAT BARGAIN.
300-bbl. flour mill with feed grinding equipment and ample facilities for handling feed. 50,000-bu. cribbed elevator. Buildings fully equipped with modern and economical machinery. Twin City Corliss engine, two Babcock-Wilcox tubular boilers, electric mill. In Boulder, Colo., two blocks from business center. General Appraisal Co. estimated value in 1921 \$163,000 without real estate, which has been appraised at \$20,000. Annual business of plant has ranged from \$600,000 to \$1,000,000. Trackage on U. P. R. R. and Col. & Sou. Ry. Boulder is one of the most attractive business and residential cities of the state, seat of the state university, 29 miles from Denver, population 12,000; 40,000 people within easy wagon haul; coal mines 8 miles by direct rail line. This plant is insured for \$60,000, which is the asking price. A splendid offer for a practical miller to get well established business in an ideal locality. Price represents a great sacrifice for the owners, but a real bargain for the buyer. Address E. C. Hanley, Colorado National Bank, Denver, Colo.

SITUATION WANTED.

WANTED—Position as manager of elevator; 12 years' experience; not afraid of work. Address 53Z9, Grain Dealers Journal, Chicago.

WANT position as Grain Buyer; 15 years' experience; married; Nebr. or Iowa preferred. Address 53Z16, Grain Dealers Journal, Chicago.

WANTED—Position as elevator manager; 20 years experience in grain business. Can furnish references. Address 53Y15, Grain Dealers Journal, Chicago, Illinois.

WANTED POSITION as manager for Farmers' Elevator or Line Company; twelve years' experience. Best of references. Address H. L. Walsh, Sac City, Iowa.

POSITION WANTED as manager of elevator; 20 years' experience in grain, coal and feed business. Address 53X10, Grain Dealers Journal, Chicago, Illinois.

WANTED—Position as manager farmers' elevator; 12 years' experience; understand side lines, books; best of references. Address 54A3, Grain Dealers Journal, Chicago, Ill.

YOUNG MAN wants position with some grain company, farmers' elevator or commission firm; 10 years' experience; can furnish best of references. Address 53Z2, Grain Dealers Journal, Chicago, Illinois.

WANTED—Position as manager of elevator; have had several years' experience in grain, feed, flour, coal and seed business. Can furnish good reference. Address 54A2, Grain Dealers Journal, Chicago, Ill.

POSITION WANTED in grain elevator; age 20, four years' experience, able to run any part of business in feed and grain dealing. Can furnish best of references. Address A. J. Buescher, Treloar, Mo.

MAN WITH 24 YEARS' experience in the grain business wants position with some good firm; capable of handling any position; now employed, desires a change. Address 53U4, Grain Dealers Journal, Chicago, Illinois.

MAN WITH 10 YEARS' experience in the grain business desires change to town with good schools. Guarantee profitable business if my policy of administration adhered to. Best of references. Address 54A18, Grain Dealers Journal, Chicago, Illinois.

FUNNY EXPERIENCES

FUNNY STORIES WANTED

Write the story of your funniest grain trade experience to the Journal and you will receive one dollar for each story published. Address The Smile Coaxer, Grain Dealers Journal, Chicago, Ill.

HELP WANTED.

SECOND MAN WANTED to work in elevator. State experience and salary expected. Address 53Z4, Grain Dealers Journal, Chicago, Ill.

WANTED—Competent man for country elevator, must have had experience. Married man preferred, house furnished. Address 53Y1, Grain Dealers Journal, Chicago, Ill.

YOUNG MAN WANTED, not over thirty years of age, to travel soliciting grain business and buying grain through Illinois, Missouri, Kansas and Nebraska. Must come well recommended. Address 53X15, Grain Dealers Journal, Chicago, Illinois.

EXPERIENCED MANAGER wanted to take my position with farmers elevator; must have \$2,000 to buy my interest in farm and stock in elevator. Address 53Y19, Grain Dealers Journal, Chicago, Ill.

"Please discontinue my adv. in the Journal, of help wanted. I have so many replies that I think I will have no trouble in securing the help wanted." This is from an Iowa elevator operator who ran an ad in this column recently.

PARTNERS WANTED.

YOU CAN SECURE a partner if you make your wants known to the grain trade through the Partners Wanted column of the Grain Dealers Journal.

BAGS—BAGGING BURLAP.

BURLAP BAGS OF EVERY KIND FOR SALE; new or second-hand, plain or printed with your brand; seamless Cotton Grain Bags; Sample Bags; Burlap, Cotton Sheeting or Paper for Car Lining, etc. Wanted Second-hand bags, best prices paid. WM. ROSS & CO., 409 N. Peoria St., Chicago.

MISCELLANEOUS WANTED

WANTED—Bean and Pea pickings and Millings, also low germination stock. Address George W. Young Company, Owosso, Michigan.

SAMPLE ENVELOPES.

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed, made of very heavy manila for strength and durability and to withstand hard usage. Special folding method for closing envelope. Have a limited supply to sell at \$2.75 per hundred or in lots of 500, \$2.50 per hundred, f.o.b. Chicago. Sample mailed on request. Grain Dealers Journal, 309 S. LaSalle St., Chicago, Ill.

MACHINES WANTED.

AIR BLAST CAR LOADER wanted with 2,000 bushel capacity grain loading. Address West Bend Malting Co., West Bend, Wis.

ENGINES FOR SALE.

GAS ENGINE—30 h.p. Stover, excellent shape. Standard Mill Supply Co., 501 Waldheim Bldg., Kansas City, Missouri.

30 H. P. FOOS Engine for sale; good as new; priced right. Address E. C. Wegener Grain Company, Minco, Oklahoma.

GASOLINE AND OIL ENGINES of all kinds, sizes and prices can be sold profitably through the "Oil and Gas Engines" columns of the Grain Dealers Journal of Chicago.

ONE BROWN-COCHRAN Gas Engine for sale, 20 h. p., speed 215, in good condition. Price \$200 f. o. b. Buckley, Ill. Motors now used. Buckley Farmers' Grain Co., Buckley, Ill.

20 H. P. MUNCIE Oil Engine with muffler, fuel barrel, 36-inch clutch pulley complete; used only 18 months; price \$400 f. o. b. Connersville, Ind. Address Earl W. Wise, 520 Eastern Ave., Connersville, Indiana.

FOR SALE—15 H.P. rebuilt Type "Z" Fairbanks Engine, cheap. Also 15 H.P. Type "Y" Fairbanks Engine rebuilt and guaranteed. Also 5 H.P., 10 H.P., 15 H.P. and 21 H.P. Otto engines practically new. R. M. Van Ness Construction Co., Omaha, Nebr.

SCALES FOR SALE.

FOR SALE—One 400 bu. Howe Hopper Scale, has been used only about 4 years, good condition. Apply Farmers Union Co., Upland, Nebr.

SECOND HAND SCALES for sale of any make, size or price, always find ready buyers when represented in the "Scales For Sale" columns of the Grain Dealers Journal.

FOR SALE—One 4 bu. Richardson and two Richardson 8 bu. automatic scales. All self compensating; fine condition. One 8 bu. Avery; one R. R. track scale. Standard Mill Supply Co., 501 Waldheim Bldg., Kansas City, Mo.

FOR SALE—Two rebuilt 4-ton Fairbanks Scales with compound beam. Guaranteed first class condition. \$75.00 each.

One 6-ton Howe Scale, good as new.
One 10-ton Howe Scale, complete with steel frame, good as new.

One 4-bushel Richardson Automatic Scale in first class condition.
R. M. Van Ness Construction Co., Omaha, Nebr.

KEEP POSTED

GRAIN DEALERS JOURNAL

309 So. La Salle St., Chicago, Ill.

Gentlemen:—In order to keep us posted regarding what is going on in the grain trade outside our office, please send us the *Grain Dealers Journal* on the 10th and 25th of each month. Enclosed find Two Dollars for one year.

Name of Firm

Capacity of Elevator

Post Office

State

MACHINES FOR SALE

FOR SALE—24 inch Monarch Attrition Mill, almost new, \$150. Box 163, Sidney, Ohio.

ATTRITION MILL.

Two 36-in. Bauer Ball Bearing Attrition Mills cheap for quick sale. Standard Mill Supply Co., 501 Waldheim Bldg., Kansas City, Mo.

FOR SALE—A nearly new Marvel Vita Cereal Mill at 25% less than cost. A good machine and a money maker. Milton Milling Co., Carl Junction, Mo.

FOR SALE—One 3 pair high 9x18 Allis Feed Mill in excellent condition. Price reasonable. Standard Mill Supply Co., 501 Waldheim Bldg., Kansas City, Missouri.

ATTENTION, OAT CLIPPER.

One No. 10 Invincible Oat Clipper, including Out Board Bearing. Wire us for price on this. Standard Mill Supply Company, 501 Waldheim Bldg., Kansas City, Mo.

FOR SALE—One Owen's Marquis Grain Cleaner No. 60; one Monitor Barley Cleaner No. 4; one Eureka Cockle and Seed Separating Cylinder. All machines in good condition. Address Farmers Elevator Co., Wanamingo, Minn.

WE HAVE FOR SALE at Mitchell, Iowa, a number of second-hand machines from a flour mill. A wheat separator, cockle machine and plansifter, besides a great amount of belting, elevator conveyor, etc., being among them. Address A. R. Coffeen, Decorah, Ia.

THE BEST WAY to dispose of anything is to advertise it. You may have something to sell or trade which would be of advantage to many who are unaware of the opportunity offered because you are not letting it be known to our subscribers through the columns of this publication.

FOR SALE—Two 20" motor driven ball bearing Monarch Attrition Mills; 20" Unique Attrition Mill; 20" and 24" Dreadnaughts; 1 Munson (the best mill made) 24" motor driven B.B. (new). Spiral steel conveyor; Union special Bag sewing machine; mixers; corn graders; Bean cleaners; Dust collectors cyclone type special price; pulleys; hangers; one 56" water wheel; Automatic scales. Everything for the elevator. A. D. Hughes Co., Wayland, Mich.

MACHINES FOR SALE

FOR SALE CHEAP—Latest Type Strong Scott Pneumatic Air Dump, complete. Winters Dump Co., 240 So. 4th St., Minneapolis, Minn.

ATTENTION! BARGAIN.

Four 120-bushel Nordyke & Marmon Driers and Coolers, latest style. Wire us for price on these. Standard Mill Supply Co., 501 Waldheim Bldg., Kansas City, Mo.

ATTRITION MILLS, 22" Bauer; 18", 20" and 24" Dreadnaught; 12" and 26" Diamond; 20" Sprout-Waldron; 24" Robinson; 10" Letz; 18" American. Dreadnaught screen and crusher, other crushers \$35 and up. Address L. F. Perrin, Box 375, Port Huron, Mich.

REAL BARGAINS.

Prompt Attention. Quick Shipments.

When in need of elevator or mill machinery, notify us. We are headquarters for power and transmission equipment, and have on hand several well-known makes of motors, boilers, engines, etc.

Send us list of all your wants. We can supply you with full line of machinery for elevators, flour, corn and cereal mills. Complete equipment for modern mills of all kinds, molasses, stock and poultry feed plants, plans, specifications, flow sheets, etc., our specialty.

Write us without delay.

W. R. Leathers, Mgr.

9 S. Clinton St. Chicago, Ill.

BARGAINS IN MACHINERY.

1 Fairbanks-Morse 1,000 gallon fire pump, good order, \$900.00.

1 Hughes 750 gallon fire pump, \$600.00.

1 condensing pump, special made by Filer & Stowell, Milwaukee, Wis., \$175.00.

2 Engines (Right & Left) Stroke 24x42—Corliss Valve made by Filer & Stowell, Milwaukee, Wis., equipped with 1 1/4-ft. rope sheave 46" face—22—1 1/2" rope grooves, \$3920.00.

1 10-ft. rope sheave 35 1/2" face 17—1 1/2" rope grooves, \$320.00.

1 Alberger feed water heater, \$75.00.

2 Westinghouse 7x9 air compressors, \$80.

The above is the appraised valuation of this machinery. No reasonable offer will be rejected.

GRAIN MARKETING COMPANY.

208 S. LaSalle St. Chicago, Ill.

DYNAMOS—MOTORS.

DYNAMOS AND MOTORS WANTED—Buyers of this equipment are reached in largest numbers and at the least expense through the use of the "DYNAMOS-MOTORS" columns of the Grain Dealers Journal—the medium for power bargains.

FLOUR FOR SALE.

MIXED CARS of flour and mill feeds in 100 pound sacks are our specialties. We are now manufacturing a full line of corn goods, cracked corn, feed meal, corn and oats chop. Ohio Farm feed, shelled corn and standard oats in connection with our flouring mill. Would like to send you a trial to convince you of the superiority of our products. Ansted & Burk Co., Springfield, Ohio.

GRAIN FOR SALE.

GET OUR PRICES on Red Top or Sumach, Black Amber and Orange Cane Seed, also Sudan Grass in carload lots. SHARP GRAIN CO., Healy, Kansas.

EXPORT GRAIN WANTED.

IMPORTER wants offers, c. i. f. Hamburg, for grain to sell on the Berlin Exchange. Rudolph Janicke, Berlin-Schoneberg. Telegrams: "steel-transit Berlin."

EAR CORN WANTED.

WANTED—Good sound ear corn, any color. Wire or write Stiefel & Levy, Fort Wayne, Ind.

FEED WANTED.

WANTED prices of fodder, damaged grain, flour and sweepings. Address 54A21, Grain Dealers Journal, Chicago, Ill.

Field and Grass Seed Trade Directory

BALTIMORE, MD.

Wm. G. Scarlett & Co., wholesale seed merchants.

BUFFALO, N. Y.

Stanford Seed Co., The, wholesale field seeds

CHICAGO, ILL.

Barkemeyer Grain & Seed Co., field seed dealers.

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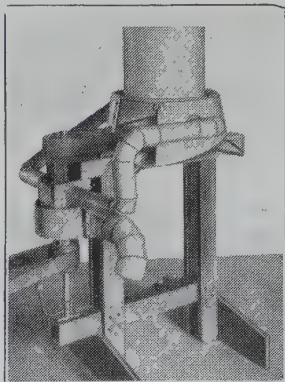
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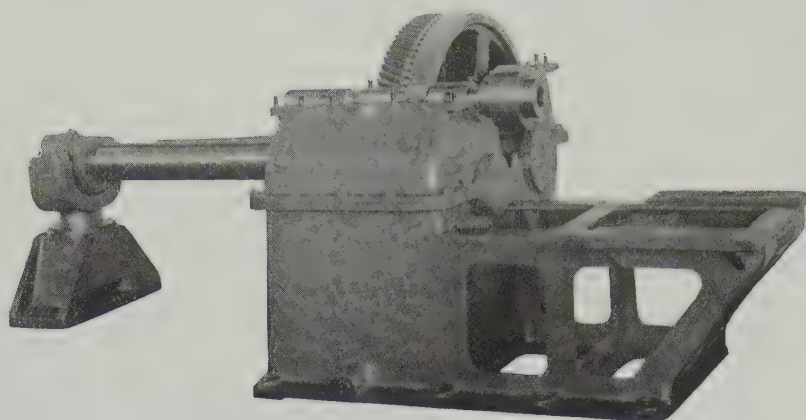
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GRAIN DEALERS JOURNAL

309 South LaSalle Street, Chicago, Ill., U. S. A.
Charles S. Clark, Manager

Published on the 10th and 25th of each month in the interests of better business methods and improved handling facilities for progressive wholesale dealers in grain and field seeds.

SUBSCRIPTION RATES to United States, semi-monthly, one year, cash with order, \$2.00; single copy, 15c.

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THE ADVERTISING value of the Grain Dealers Journal as a medium for reaching progressive grain dealers and elevator men is unquestioned. The character and number of advertisements in each number tell of its worth. If you would be classed with the leading firms catering to the wholesale grain trade, place your announcements in the Journal.

Advertisements of meritorious grain elevator machinery and supplies and of responsible firms who seek to serve grain dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain trade, news items, reports on crops, grain movement, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. Address "Asked-Answered" department. The service is free.

CHICAGO, JANUARY 10, 1925

AT LAST one wise governor who has been striving to help the market fakers string the farmers has learned how to market his pardoning power. His self-constructed halo seems to be on crooked.

A FAKER advertising in a farm journal heads his appeal with the words, "Money in Grain. \$12.50 buys guarantee option on 10,000 bus. of wheat or corn. No further risk. A movement of 5c from option price gives you opportunity to make \$500." And farmers who place their money on such games as this blame the Board of Trade when they lose.

ACCORDING to Dun's Review, 20,550 business firms failed during 1924, against 18,718 during the preceding year. If every grain dealer were to make a determined effort to stop overbidding at his station and keep an accurate record of all costs of handling grain, the number of failures in the grain trade would be materially reduced.

PRIVATE car owners will contest the decision by the Interstate Commerce Commission that privately-owned coal cars are subject to pro rata distribution in times of car shortage. Unless owners of private cars can retain some control over their property, especially at times when cars are in demand, they will be slow to invest in rolling stock. Curiously, on the same day the U. S. Supreme Court held invalid the Michigan law making a common carrier of one operating motor vehicles for hire on the public highway, as it would prevent such owner from performing his private contracts.

THE RAINMAKERS of California which encouraged drouth-stricken districts to contribute to their support three, four, and five years ago seem to have given up for lack of more suckers with ready money.

MATCHES should not be tolerated around grain elevators or in the pockets of grain elevator workers. The Wilson Flour Mills of Wilson, Kans., has complained to insurance writers that recently it has found sulphur matches which can be ignited by rubbing any surface, in three different consignments of wheat. In fact, the last find was an entire box of matches and the box got into the receiving separator before discovery. The country elevator man who aspires to burn up the mill of any good customer can of course increase the chances by filling the wheat with sulphur matches.

A TERMINAL market receiver who recently discontinued mailing out market cards writes his customers that "there were so many cards going out from this market we considered ours a duplication." Many others have arrived at the same conclusion and discontinued the wasteful expense. Several of the smaller markets have greatly reduced the expense of sending out market information by consolidating all mailing lists and sending a report daily from all of the receivers so that instead of patrons of the market receiving nine different market reports they receive but one and the chances of their reading it through are nine to one in its favor, as against the former practice of sending him nine letters or market cards. Receivers generally are convinced that all of the recipients of their letters do not read them. In fact, if some country dealers undertook to read all the market letters received they would have no time to eat, sleep or work. An economical substitute for the multiplicity of market letters should surely be welcome to all parties concerned.

SOVIETIZERS of America working at Washington have found as their most useful tool the declaration that rents in the District of Columbia, child labor in the factories and on the farm, and future trading in Illinois, are "affected with a public interest." When the first future trading law came before the Supreme Court it was held unconstitutional because the court had only their common sense to guide them and found there was in fact no "public interest" to be protected. The agitators immediately remedied this by substituting a declaration for the fact. Child labor, rents, interest, future trading, white slavery, are of some public interest, but the error is made in holding that public interest is necessarily federal interest. So with education, maternity and good roads. These excursions by the federal government into the proper spheres of state authority unfairly distribute taxes collected in one part of the country for the benefit of persons in other states whose contributions are very small. Since it is true that every activity of our citizens is affected with public interest in some small degree it can be seen that there is no limit to regulation by such congressional fiat.

TEXAS' Statute against future trading in grain is on the greased skids, a suit having been started under the law against members of the Chicago Board, who will be able to use the recent decision in a Kansas case to the effect that the federal Grain Futures Act supercedes state legislation.

POOLING contracts all are open to the same objection found by the court at Booneville, Ind., recently, holding that the contract was not binding on members on account of lack of mutuality. The opinion of the court was that the only clauses of the contract which bound the Dark Tobacco Growers' Ass'n to anything were so uncertain that no court could determine the liability of the ass'n. Where courts have stressed the membership principle, as in Texas, the pool authority has been sustained. The safest course for the growers is not to sign any pooling contracts.

HUNDREDS of millions of dollars are reported by a recent Department of Agriculture circular as having been loaned to co-operative marketing ass'ns and individual farmers on the basis of warehouse receipts, issued by warehousemen licensed under the United States Warehouse Act. The purpose is to show a demand for this government aid. When analyzed it shows the contrary. Our crops are valued at billions of dollars, and one hundred million dollars is a negligible percentage of the whole. Considering that over a score of co-operative concerns, some of them with a poor financial rating, have had the federal government funds thrust on them by the Intermediate Credit Banks and the Federal Reserve System the showing is poor indeed. If the federal bureaucratic system of loaning money to co-operative enterprises had to pay the same taxes as do the private enterprises that keep the government functioning it could not compete with private and state bankers and regular warehousemen, but the system gives the non-working bureaucrats license to grab the taxpayers' money.

DISCOUNTS on lower grades of corn are ruinous. Feeders and the industries are backing away from the flood, while speculators are so confident the price will be higher next summer that they are taking all the contract corn offered. The soft corn likewise will be worth more money next summer but no one is taking a chance on storing soft corn thru the coming germination period. The low price on soft corn is the market's natural assistance toward a policy of consuming the low grades and saving the sound corn. As terminal storage capacity is becoming exhausted the corn should be held back in the country until a place can be found for it. A railway car on an embargoed road is about the poorest place to store soft corn. Fortunately the grain trade as regularly organized has a means to cope with this situation, by sales of the July future against corn held in the country, even as far back as the crib on the farm, if the dealer at the country station, as in recent years, has no cribs of his own. When July rolls round the country shipper will be gratified to find that the discounts are no longer ruinous, so that the hedge may be taken off with an unexpected profit of 10 cents per bushel or more.

THE ACTION of the Directors of the Grain Dealers National Ass'n as told of in our "Letters" column, this number, may make the Robinson code words for "Time of Delivery" mean *time of shipment* to the members of the ass'n, but thousands of others will interpret the code words mean "time of delivery" at destination and care must be exercised if misunderstandings are to be avoided.

PRIVILEGE TRADING should be restored on American exchanges for the benefit of cash grain dealers who need their protection. The federal tax on the sale of privileges is a gross usurpation of power to prohibit not granted by the Constitution. The effect of this bad law has been to compel a few gamblers to bet on something else and to compel legitimate buyers of grain to assume risks that formerly they could shift on the insurance group. When a bill is introduced to abolish this tax it would be wise to accept no compromise, but to abolish the tax entirely, as the price paid for the privilege falls in the same class as a premium paid for fire insurance.

BIN BURNT OATS have long been recognized by most members of the trade as merchantable grain, but a number of cars were shipped from Louisville, Ky., to Norfolk, Va., recently which the bureaucrats of the Dept. of Agri. and Feed Dept. of the State Government persist in declaring unfit. Such decisions are so ridiculous that it almost takes one's breath. The haughty superiority of the numbskulls conducting these departments of course will soon result in their downfall, but in the meantime trade and commerce suffer because so large authority has been placed in the hands of such small men. The inspection records of every market ever since the exact grading of grain was provided for, show the shipment each year of many car loads of bin burnt grain in interstate commerce and without injury to anyone and what is more, without any thought of interference by any inspector of grain, all of whom were supposed to know the feeding value of such grain.

GOVERNMENT interference with the regulation and price of wheat is the subject of Senate Resolution 249 introduced Dec. 30 by Norbeck of South Dakota. It is cheering to note that the lawmakers are studying what they term "amount of losses sustained by wheat growers of the United States during period of government interference." How about the losses sustained by grain dealers when the government fixed downward the price of wheat they had on hand? And another instance where the farmers are suffering loss is the present interference of the government with future trading, whereby big buyers are scared out and the Winnipeg unsold upon market keeps several cents above the Chicago parity. With the Grain Futures Act in force Leiter could not have accumulated 157,000,000 bus. of wheat. Before he could have bought 50,000,000 the federal government would have known it, with power under the Act to rule the gentleman off all the exchanges. Who can doubt that the farmers would be getting 5 to 10 cents per bushel more for their wheat if the bull speculators had a free hand. The bureaucrats do no one any good.

THE BEGINNING of the new year is a good time to resolve to make a more persistent effort to gain some of the business of all of the farmers of your territory. Any intelligent effort at building up good will is sure to help to turn the farmers to your office even though you do not buy their grain or sell them supplies. Keeping them posted regarding your facilities and your different efforts to serve them will always please them and it may help you. Try it out.

LIMITING the daily price range of commodities on the exchanges, an expedient born of the war, has no place in the peace-time functioning of the markets, which must be free and untrammelled if they are to reflect the full force of supply and demand. To understand how unsound is this proposition apply the limit to the week, the month and the year, as well as the day. That is: by edict declare that no sales or purchases of wheat shall be made on the exchanges ten cents higher than the low of the week, 20 cents higher than the low of the month, or 50 cents higher than the low of the year. Then every purchase of wheat made during the past few months on the Chicago Board of Trade from \$1.50 to \$1.85 would have been unlawful. Exporters willing to pay \$1.75 or more would have "bootlegged" the grain, buying on the "curb." The only effect would be destruction of the usefulness of the exchanges, and an invitation to sharks to enter the grain business.

Fewer Cars Leaking Grain.

We are pleased to report that the grain carrying railroads of the surplus states are striving earnestly to make a joke out of our "Leaking in Transit" column. We don't blame them. In years gone by we have published many reports which have helped shippers to establish the fact that cars shipped by them did leak grain in transit. We were glad to render the service and hope that it has helped to bring about a marked improvement in the condition of cars tendered shippers for grain.

The Media Farmers Grain Co. of Media, Ill., recently wrote us that "car equipment was so good during 1924 that not one of the cars loaded by us was reported leaking." That is most encouraging and we hope the time is near at hand when no grain shipper will suffer loss in transit. However, poor cars, deficient coöpering and rough handling are still causing some leaks as is clearly indicated by the report of the Chicago Board of Trade weighing department which shows that during 1924 its track representatives found 12,133 leaks in 10,966 cars loaded with grain. This was out of a total number of cars received during the year of 165,044. It represents a reduction in the number of cars leaking of about 1% as compared with 1923.

Grain dealers who are interested in reducing their loss by leaks and improving their efficiency in coöpering will be interested to learn that the leaks reported were charged to different parts of the car as follows: Grain doors, 2,087; over grain doors, 1,887; sides of cars, 3,376; ends of cars, 1,329; king bolts, 7; draw bars, 218; other points, 3,229.

Change in Legislative Situation at Washington.

Every day that passes and every day that sees farm prices maintained at a high level forecloses the opportunity of agitators in Congress to enact legislation singling out the farmer for special favors.

Two and three years ago the advocates of farm relief were content to press each his own measure; but now that there is a prospect that one bill only can be enacted, the different groups have begun fighting among themselves for the preference. One group denounces the Capper-Williams bill for a Federal Marketing Board as vicious in principle, as providing that "the government, itself preyed upon by a horde of politicians, shall manage the business of the farmer."

The ratio price idea underlying the McNary-Haugen bill has been completely abandoned.

The Norris-Sinclair bill for a big government corporation to buy and sell the crops has but little better support.

The \$10,000,000 appropriation seems to be the chief attraction and bait for farm support of the Curtis-Aswell bill, creating the Interstate Farm Marketing Ass'n. The Interstate Farm Marketing Ass'n would actually be permitted to enter the business field and become a form of middleman, doing the marketing, instead of merely supervising, acquiring, constructing and maintaining warehouses for agricultural commodities, taking over facilities for transportation and factories for producing finished products. The Interstate Farm Marketing Ass'n would be authorized to organize state co-operative marketing ass'ns and collect commodity assessments from them.

Favorably reporting this bill to the Senate, the Senate Com'te provided that 12 directors should be selected, 4 by the Farmers' Educational & Co-operative Union of America, 4 by the National Grange & Patrons of husbandry and 4 by the American Farm Bureau Federation. In such manner would the Marketing Ass'n be controlled by farmers. Neither the U. S. Dept. of Agriculture nor single groups of agitators can assure themselves in advance of its passage that they will have the distribution of the \$10,000,000 juicy melon, and the bill is losing support.

The California co-operative groups are against any new legislation, declaring there are laws enough now to make co-operative marketing effective.

Best of all, from the standpoint of the taxpayer, is the growing disposition of congressmen to consider each bill on its merits. Less is likely to be heard about "members of Congress voting for a bill without reading it" or because it had the endorsement of a certain set of lobbyists. It is felt now that such a confession would be held a betrayal of their constituents.

Grain dealers are not opposed to legislation for the benefit of the farmer, but they are, and of right ought to be, opposed to government money being employed to set up their competitors in the business of buying and selling. When the government takes \$10,000,000 collected from the grain dealer and other citizens in taxes and pays it over to organizers of so-called co-

operative societies it is in effect a subsidy of one class of business at the expense of all and to the special damage of the middleman whom the co-operative organization is designed to supplant.

The co-operative idea has been worked out in the grain trade, at country stations particularly, so completely that it is no longer a novelty. It has been found that the co-operative company is subject to the same burdens as the private enterprise, in having to pay the price of good management, the salary of a good manager, and exact a margin sufficient to cover expenses, or go to the wall. The co-operative concern is simply a competitor, whose presence is accepted, and in those parts of the country where co-operative companies have been numerous tried out, the co-operative idea has ceased to be a fetish. There is an abundance of local capital available for the organization of co-operative societies without squandering public money among politicians, and doubtless the existing co-operatives and their stockholders will be much better off without any interference or regulation by the government. They are nearer to their marketing problems and are far more competent to handle them intelligently than all the agitators, demagogues and lawmakers combined.

Bill to Create Federal Marketing Board.

Congressman Williams of Michigan has introduced H. R. 10593 to create a federal marketing board of 7 members receiving \$10,000 annually each, which board shall have power to issue charters to co-operative clearing house ass'ns and to terminal market ass'ns. While such co-operative ass'ns so chartered by the Board are subjected to the most rigid requirements as to keeping accounts on forms prescribed and permitting inspection by spies for the Board of all their books, accounts and papers, such federal charter is not compulsory.

Boards of Trade may be granted federal charters, placing them under burdensome restriction; but, again, this is not compulsory.

State grain inspection departments and those of the exchanges employing federal licensed inspectors, and who pay the salaries of such inspectors, are cautioned against permitting the enactment of paragraph (h) of Sec. 4, which provides that the board has power to fix the fees for inspections.

The worst feature of the bill from the standpoint of the taxpayers who have to foot the extravagances of the lawmakers is the appropriation of \$5,000,000 to make loans to weak organizations, not upon any tangible security or collateral, but to pay the expenses of organizing. If this clause becomes law unquestionably there will be many co-operative societies formed without legitimate purpose to handle commodities, but solely to get a "loan" to be paid out to the "workers" and never repaid to the government, the bill providing "There shall be no individual liability on the individual members of such ass'n for such loan." Sec. 11, reads in full, as follows:

Sec. 11. When in the judgment of the Federal Marketing Board new cooperative marketing ass'ns or new cooperative clearing-house ass'ns, or ass'ns of insufficient membership, can be wisely assisted thereby, the board is authorized to loan to such ass'n from the revolving fund created hereby, during a period not to exceed two years as to any one ass'n, such sums as may in the judgment of the board be required to organize its membership and to cover part or the whole of the organization and administration expenses of the ass'n. Ass'ns receiving such loans shall impose a charge on the commodities marketed thru the ass'n which will, over such term of years as the board may determine, be expected to repay the loan. All such loans shall be evidenced by a proper instrument executed by the ass'n receiving the same, shall bear interest at 5 per centum per annum, and shall be fully payable within ten years from the date thereof. There shall be no liability on the individual members of such ass'n for such loan.

Letters

[Here is the grain dealers' forum for the discussion of grain trade problems, practices and needed reforms. When you have anything to say of interest to members of the grain trade, send it to the Journal for publication. It may draw out the views of others.]

Dealer Not to Blame When Paying All His Freight Warrants.

Grain Dealers Journal: One of the disagreeable things we encounter is the fault-finding by farmers when we do not pay as much for grain as a neighboring dealer at a station close by. A good way to remove this dissatisfaction is to explain that the freight rates are different from the two points to the market that happens to be highest for that kind of grain.

At Leonard, Ill., a station on the T., P. & W. the grain buyer got the repute of being low, but in his case it was not that the buyer at Leonard had any less ability than buyers at Crescent City, to the east, or at Gilman, to the west. The difference was because Leonard had to pay a higher freight rate than either of the other towns.

It is evident that the railroads cannot charge the same freight rate to all towns but that there must be changes occasionally. It so happened that in this case the change was made for eastern shipments, between Crescent City and Leonard, with the Leonard rate about 1½ cents more per 100 pounds than the Crescent City rate.

It also happened that the breaking point in freight rates going west from Leonard came between Leonard and Gilman, giving Gilman a lower rate for western shipments. And in addition to this advantage in T. P. & W. rates west, Gilman had the Illinois Central outlet to either north or south.

The grain buyer is constantly informed as to what market is giving the best bids. Sometimes it is Chicago, sometimes St. Louis, Peoria or Indianapolis, or Cleveland, or Louisville, or New Orleans for export. Chicago is known as the controlling market, and it is, in theory at least, supposed to follow the Liverpool market, but other markets are quite often higher than Chicago.

McLean and neighboring counties ship grain in all directions. Stations located on the I. C., the C. & A., Wabash, C. & E. I. and the Santa Fe have an advantage when the Chicago market is the best, the advantage being over the group of railroads that run east and west. When Indianapolis or other eastern markets are bidding higher than Chicago, the advantage goes to stations on the east and west lines such as the Big 4 (P. & E.), Vandalia, Nickel Plate, T. P. & W., N. Y. Central and others.

The markets vary often within a week, when Chicago is best, stations on the north and south lines have the advantage, and when the eastern markets are best the stations on these cross-lines have the advantage.

Farmers have observed that sometimes stations on the I. C. and the C. & A. are bidding way above the stations on the cross-lines. That is when the exporters are the principal buyers. Central Illinois stations on these lines have a rate of 26 cents a hundred to New Orleans—a much lower rate than any of the stations on other lines.

An unusual situation exists in eastern Woodford county. Benson and Roanoke, on the Santa Fe, have an advantage over Secor, on the T. P. & W. when Chicago is the best market. El Paso also has an advantage over Secor then, for it is on the I. C. But when the eastern markets are higher than the Chicago market, then Secor has an advantage over Benson

and Roanoke. Then when the exporters are dominating the market El Paso and Minonk can take advantage of the New Orleans rate and it has the advantage.—C. I. S.

Meddling Directors.

Grain Dealers Journal: Good management can make a success of a farmers elevator. I have managed farmers' elevators for 14 years and have yet my first year to show a loss, or less than 19% profit. I follow the rule to have a profit on each and every load of grain that comes into the elevator, and I cinch that profit by selling that day. Then I sleep well at night. If Bill, the old elevator man, is paying more than the grain is worth I let him have it. He will soon get into line.

One reason of failure is not enough working capital.

Directors who interfere with the manager are a handicap. As a rule the directors want the manager to make profits, but each one wants the manager to show him favors.

A helper, as a rule, is required by a manager; altho when he was working for a line house he handled twice the grain alone.

One reason for the lack of capital is that if the house makes as much as 10 per cent profit the directors want to declare a dividend in place of having some money to work on.—An Old Timer.

"Time of Delivery" to Carrier.

Grain Dealers Journal: The Board of Directors of the Grain Dealers' National Ass'n has officially defined, so far as the Association's membership is concerned, the meaning of the code word "Bounce" in the Robinson Code. The definition of the Board is as follows:

"That 'Time of Delivery' as provided on page 20 of the 1897 Revised edition of the Robinson Telegraphic Cipher shall mean 'Time of Delivery to the carrier for transportation to destination' and not 'Time of delivery at destination.'"

This action of the Board was the result of a controversy that arose in the trade over the meaning of the word. C. D. Sturtevant, of Omaha, chairman of the Association's trade rules committee, prepared the above definition after consultation with the other members of his committee and then submitted it to the directors who approved it.

Mr. Sturtevant points out in his letter to the other members of the trade rules committee that a reference to the Robinson code, page 20, will disclose the fact that all of the code words relating to time as used in contracts are under the heading "Time of Delivery." The universal custom is, of course, to use these words to mean "Time of Shipment."

Now that the controversy over the meaning of the word has arisen it will not be long, the chairman of the trade rules committee thinks, before some of the Association's arbitration committees will be confronted with a case where the buyer of grain will seek to escape liability on this point. It was to anticipate any such proceeding that Chairman Sturtevant prepared the definition of the word and asked for the approval of the Board of Directors.

The constitution of the Grain Dealers' National Ass'n provides that all rules such as trade rules and arbitration rules, must be made or amended by all the members in annual convention. However, provision is made for meeting emergencies between annual meetings. The members of the Board of Directors may amend or make any necessary rule or rules, these amendments or new rules to be in full force and effect until the next annual meeting when they shall be considered by the convention and either adopted permanently or be modified or rejected.

The definition will be accepted by all arbitration committees of the Association from now until the next annual convention which is to be held at Kansas City, Mo., on October 12, 13 and 14. Chairman Sturtevant will present the matter to the convention and ask for its permanent disposition. Very truly, Charles Quinn, Secretary Grain Dealers' National Ass'n.

Asked— Answered

[Readers who fail to find information desired on any subject of interest to grain dealers should send us their query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

Official Weight Certificate Final?

Grain Dealers Journal: Will the Journal please suggest how to straighten out a tangle like this:

C. M. Carter Grain Co. shipped us a car of oats containing 300 bags to contain 160 pounds each. There was a shortage of three pounds per bag verified by the State Markets and Warehouse representative who personally supervised weighing two hundred of the sacks, one at a time. Carter Grain refuse to pay, assuming an in-between attitude between shipper, Smith Bros. Grain Co., and ourselves. They claim official weights, submit certificate and state that is the end. We have the dope absolutely that there was a shortage.

What is the use of Federal, State and County weight supervision that does not give us correct weights?—Coker & Co., Ennis, Tex.

Ans.: If the contract specified that the weights were to be those at point of origin the buyer can not force the seller to take any other weights, in the absence of fraud.

In this case the weights at both ends were official and entitled to the same credibility; and the law will uphold the weights at point of origin, in the absence of fraud, on the ground that there may have been shrinkage due to evaporation of moisture.

Smith Bros. Grain Co. also has the privilege under the rules of evidence of showing that other weights over the same scales at about the same time, held out at point of destination, and Smith Bros. also do so much weighing out that they have their scales tested frequently, so that they would be more reliable than those at some interior point. In the absence of any proof of fraud the buyer has no recourse.

Who Pays Undercharge?

Grain Dealers Journal: We sold a car of corn to Lewisburg, Tenn., basis a certain rate and prepaid the freight on what we thought was the correct rate. Now there seems to be an amount due the railroad company at Lewisburg for freight due on this shipment, while this shipment was made July 26, 1923, and the railroad company is writing us to pay this amount due them.

As Lewisburg, Tenn., is not a prepaid station we are under the impression that as the receiver received and unloaded the shipment without anything being said as to the difference in freight that the receiver at the point to which the shipment was shipped is responsible for the freight due the railroad company on this shipment and then if the receiver thinks that we are liable for any of the freight on the shipment shipped him, let him take the matter up with us direct.

We will thank you to advise as to who is responsible for this amount of freight which the railroad claims is due it, that is who is liable to the railroad company, the shipper or the receiver of the shipments.—Brocton Elevator Co., Brocton, Ill.

Ans.: Under the Interstate Commerce Act both the shipper and receiver are responsible to the railroad company, which can choose from whom to collect the undercharge.

After having met the demand of the carrier by paying the undercharge either seller or buyer has the privilege of taking up with the other party to the contract a proper settlement of the difference, according to the terms of the contract, which in this case, it seems, required shipper to pay the rate, whatever it was.

As the rate of freight could not be affected by unloading the buyer is not therefore chargeable. If buyer had been informed at time of unloading that there was an undercharge to

be paid, and had paid it, he could have held shipper for the amount, on his assumed agreement to prepay.

Before paying the undercharge demanded by the railroad company shipper should ascertain the correct rate at the time the shipment moved. A rate on any shipment that has already moved will be quoted on application to the secretary of the Interstate Commerce Commission, Washington, D. C. If this proves to be the same as now alleged by the carrier shipper has no recourse but to pay the amount.

Where Was First Elevator Built?

Grain Dealers Journal: When and where was the first grain elevator built?—Farmers Elevator & Produce Co., Bad Axe, Mich.

Ans.: The grain elevator leg was invented by Oliver Evans some time before 1786 when he applied to the state of Pennsylvania for a patent on his invention. This leg was used in small flour mills about Philadelphia for some years.

The first bulk-handling grain elevator having belt and cups was built by James Dart at Buffalo, N. Y., between 1842 and 1847.

Effect of Drying on Grain?

Grain Dealers Journal: We would like to know which of the following methods of drying is the best under the conditions in Soviet Russia: hot air, steam or vacuum? Is the value of maize diminished by drying, for export? What degree of humidity is determined for maize (corn) after being dried? Is the dried grain secure from change in humidity on exposure subsequently to the atmosphere?

The growing of corn in U. S. S. R. is developing very fast and we will have to place orders for drying machines.—Actiengesellschaft "Chleboprodukt," Moscow, Russia.

Ans.: Steam coils are used in the largest driers. Some corn is improved in value by drying, as being made possible to export. The degree of humidity is chosen by the operator of the drier so that the dried corn will fall within the official grade desired, by itself or by mixture with other corn of greater or less moisture, the moisture percentage being one of the determining factors in the grades. Corn that has been dried down only to the point where it will grade or be safe to store still contains so much moisture that it will absorb none from the air, but on long exposure may lose moisture.

The most important developments in radio during 1924 were interconnection and the use of the short wave, says S. B. Davis, solicitor of the Department of Commerce.

Coming Conventions.

Trade conventions are always worth while as they afford live, progressive grain dealers a chance to meet other fellows from the field of daily strife and to be convinced that the much maligned horns are truly mythical. You can not afford to pass up these opportunities.

Jan. 15. Mid-winter meeting of the New York State Hay & Grain Dealers Ass'n at Syracuse, N. Y.

Jan. 15-16. Indiana Grain Dealers Ass'n at Indianapolis, Ind.

Jan. 20-22. Farmers Grain Dealers Ass'n of Iowa at Fort Dodge, Ia.

Jan. 28. American Feed Manufacturers Ass'n, Chicago, Ill., special meeting called for 1 p. m.

Feb. 10, 11 and 12. Farmers Grain Dealers Ass'n of Illinois, at Peoria, Ill.

Feb. 5. Tri-State Country Grain Dealers Ass'n, at Minneapolis, Minn.

Feb. 17-18. Farmers Grain Dealers Ass'n of Indiana, Lafayette, Ind.

Feb. 26-28. Kansas Farmers Grain Dealers Ass'n, Hutchinson, Kan.

Mar. 25-27. North Dakota Farmers Grain Dealers Ass'n at Bismarck, N. D.

Feb. 17-19. Minnesota Farmers Grain Dealers Ass'n at Minneapolis.

Oct. 12-14. Grain Dealers National Ass'n at Kansas City, Mo.

Oct. 12-14. U. S. Feed Distributors Ass'n, Kansas City, Mo.

Grant M. Miles to Head Peoria Board of Trade.

Capt. Grant M. Miles will be elected pres. of the Peoria Board of Trade Monday, Jan. 12, without opposition.

Capt. Miles is the son of Charles C. Miles, one of the founders of the Peoria grain commission firm that bears his name. He was educated in the Highland Park Military Acad-



Grant M. Miles, Peoria, Ill.
Pres.-Elect Board of Trade.

emy, the Bradley Polytechnic Institute and the University of Illinois. Following his academic training he became associated with the firm of P. B. & C. C. Miles.

He entered the second officers training camp at Fort Sheridan and was commissioned Captain with high honors, serving thru 1918 with 339 Infantry of the National Army at Camp Custer.

After the World War he again became associated with his father's commission firm where he has built up an enviable record.

Other officers nominated for positions on the Peoria Board of Trade with no opposition are: 1st vice-pres., G. A. Peterson; 2nd vice-pres., H. A. Miller; sec'y, J. R. Lofgren; treas., W. C. White. Directors: L. Mueller, F. L. Wood, N. R. Moore, L. H. Murray, G. A. Breier, J. M. Van Nuys, H. H. Dewey, E. R. Murphy, W. T. Cornelison, B. E. Wrigley. Com'ite on Arbitration: A. M. Courtright, H. F. Caze, R. L. Coomber.

Program Tri-State Dealers.

For the annual meeting of the Tri-State Grain Dealers' Assn. at the New Nicollet hotel, Minneapolis, Minn., February 5, the following program has been arranged:

MORNING SESSION, 9:30 A. M.
President's address, F. E. Crandall, Mankato, Minn.

AFTERNOON SESSION, 1:00 P. M.
Luncheon at New Nicollet hotel.
Address by E. S. Woodworth, Chamber of Commerce, Minneapolis, Minn.

"My Experience With the Co-operative Marketing Law," A. O. Radke, Le Sueur Center, Minn.

"Some Legal Phases of the Minnesota Co-operative Marketing Law," Joseph N. Noonan, Waseca, Minn.

"Market Quotations of the Grain Bulletin," F. R. Durant, Minneapolis, Minn.

"The Minnesota Storage Law," J. T. Probstfeld, supervisor, Minneapolis, Minn.

Election of officers.

55 Years in the Ocean.

A cargo of milling wheat that had lain in the bottom of the ocean for 55 years was recently salvaged and sold at a good profit. The ship Cape Horn, in 1869, sank off the coast of Chile, where it remained until December, 1924. Included in its cargo was a large amount of wheat, in water-tight compartments, and 600 tons of copper.

The copper was the excuse for raising the ship. This being done, the wheat was found to be in good condition, unaffected by the limitless water that had washed over its water-tight container, and was sold to South American mills.

Large Grain Fleet Winters at Buffalo.

The largest grain fleet that has ever wintered in the Buffalo harbor is anchored there now. It consists of 119 vessels holding 37,700,662 bus. of grain for winter storage. A number of them are anchored alongside the breakwater in the outer harbor.

The grain carried consists of 26,062,866 bus. of wheat, 6,044,154 bus. of oats, 2,753,285 bus. of flaxseed, 1,460,727 bus. of rye, 1,078,630 bus. of barley and 371,000 bus. corn. Some of the vessels will be unloaded from time to time as the present stocks in the elevators are shipped out.

More than half the shipments of grain made over the Great Lakes this season were destined to Buffalo. Duluth, Superior, Port Arthur, Fort William and other shipping ports loaded 512,606,897 bus. of grain in boats. Of this amount 283,894,826 bus. were received at the port of Buffalo.

Members of the Central Seed Wheat Ass'n, which grubstaked western Kansas wheat farmers in the fall of 1923, who had insufficient funds to buy seed wheat for the 1924 crop, may receive another dividend of 10% before final disbanding of the organization, says Harry Sharp, sec'y of the organization. Dividends representing a 90% profit have already been distributed, the farmers aided having harvested one of the largest crops in history, and giving subscribers to the fund one-fifth of their crop where the yield was 5 bus. to the acre or more.

Indiana Grain Dealers Program.

The program of the Indiana Grain Dealers Ass'n for its annual meeting, which will be held in the Board of Trade building, Indianapolis, Jan. 15-16, was not completely arranged in time for publication in this number of the Journal. Sec'y Riley advises it will be a full meeting with every minute taken by discussions and talks on interesting and helpful subjects.

The meeting will begin at 1:30 p. m. on Jan. 15 and will adjourn in the afternoon of the 16th. Dinner will be served in the Chateau Room of the Claypool hotel at 6 p. m. on the 15th. The Indianapolis Board of Trade and Grain Dealers have furnished entertainment to follow it.

The following speakers and subjects are on the program:

Activities and Accomplishments of the National Ass'n—Fred G. Horner, pres. of the Grain Dealers National Ass'n.

The Regional Advisory Boards—J. A. Morris, Cincinnati, director of the District Managers of American Railroad Car Service.

Address—John W. McCordle, member of Public Service Commission of Indiana, member of Executive Com'te of Mid-West Regional Advisory Board of American Railroad Ass'n.

The Work of the Weather Bureau—John H. Armington, meteorologist, Indiana Weather Bureau.

Address—I. E. Miller, Indiana State Commissioner of Weights.

Some Observations and Recommendations by a Real Farmer—Hon. Ray C. Morgan, Knightstown, former speaker of the House of Representatives of Indiana.

Seed Corn and Its Importance and Scarcity—W. D. Littlejohn, Kentland, Ind., pres. Indiana Corn Growers Ass'n.

Evolution in the Country Grain Business, Past, Present and Future—V. E. Butler, Indianapolis. This will be followed by a general discussion by men of experience, each presenting his views on any phase of the business.

The Question Box—Answers will be given by the following men, or others to whom the questions may be assigned for answer:

A. E. Reynolds, Crawfordsville.
C. O. Wise, Connorsville.
P. E. Goodrich, Winchester.
O. L. Barr, Bicknell.
J. W. Stockhouse, Etna Green.
Ben Thomas, Columbus.
E. E. Elliott, Muncie.
H. W. Reimann, Shelbyville.
B. I. Holser, Walkerton.
Raymond Shine, New Albany.
Hon. Jacob D. Rich, Brook.
G. G. Davis, Tipton.
Harry Van Deventer, Attica.
Walter C. Moore, Covington.
Ben Levy, Ft. Wayne.
Charles Stephenson, Cyclone.
E. K. Sowash, Crownpoint.

To Advertise Michigan Beans.

An extensive advertising campaign for Michigan beans will be run during 1925. Beans are already well and widely known. The campaign will make the word "beans" more specific by adding the modifier, "Michigan."

Many elevator companies have decided to push the campaign. Several have placed placards in their windows, which read:

We are in favor of advertising Michigan beans and will deduct 1% per hundred from growers and contribute one cent per hundred ourselves. The fund collected is to be expended by joint advertising committees of growers and bean dealers.

The contributions are voluntary on the part of the growers it has been found that 95% are willing and anxious to have a share in the effort to increase the demand for the Michigan product. The campaign is being put on due to the efforts of the Michigan Bean Jobbers Ass'n, and funds are being collected under the plan originated by that organization.

Kansas City Board in New Home.

Jan. 2 the Kansas City Board of Trade moved into its new building, thereby marking another milestone of achievement.

The new 14-story structure was designed especially for the Board of Trade and stands at the corner of Tenth and Wyandotte streets. It contains 800 rooms in addition to the trading hall, there being 230,000 feet of floor space. The construction is brick and tile, reinforced with steel.

Among the many conveniences of the building are a restaurant, barber shop, men's toilet rooms on each floor, large rest room for ladies with matron in charge, iced drinking water service on each floor, automatic complete fire enclosures between each floor, the best elevator service in Kansas City (6 safety cars), 10,000 square feet of storage space for office records available at half the regular office rental, 24-hour service in the building 365 days in the year.

On the morning of the opening day the honor of making the first trades in the futures pit fell to A. J. Mackenzie and Howard Vanderslice with a sale and purchase of wheat at \$1.71½ and in corn between B. F. Hargis and B. C. Christopher. In the cash division the Shannon Grain Co. sold the first car, No. 2 white kafir, to Henry Lichtig & Co., for \$1.82. The first wheat sold for No. 2 hard, smutty, at \$1.69½ by Logan Bros. Grain Co. to the Hall-Baker Grain Co.

Flowers that loaded the sample tables expressed the approval of friends of the Board; and congratulations by wire were numerous.

The Kansas City Board of Trade was organized in 1869 with T. K. Hanna as pres. and B. M. Kean, sec'y, its transactions being confined to cash sales of wagon load lots. In the early '70s the members were able to do to all of its business in one room; but in 1876 they required a whole building. Expansion of trade forced a removal in 1887 to a building erected by the exchange at Eighth and Wyandotte streets at a cost of \$700,000; but still the business increased and the number of members grew until firms were compelled to rent quarters outside. The new building is intended to accommodate all of the 217 members.

A membership in the exchange 35 years ago cost \$25. The highest price ever paid was several years ago, \$15,000, and recent sales have been made at \$8,750.

In 1870 Kansas City received 1,037,000 bus. of grain, while in 1924 the receipts totaled 125,000,000 bus., besides which Kansas City dealers directed the movement of much more grain around the city from the north and west.

All this wonderful growth is due in large measure to the maintenance of a high standard of integrity, to fair dealing and to the formulation of well considered rules for trading.

H. C. Gamage Now Pres. at Kansas City.

The Kansas City Board of Trade is fortunate in having a large number of young men members who are of the caliber to make presidential timber. In choosing H. C. Gamage to head the administration for the ensuing year the Board assures itself its affairs will be conducted on the same high plane as in the past.

Mr. Gamage was born at Fort Madison, Ia., Aug. 3, 1886, and moved with the family to Hamilton County in 1892. His start in the grain business was made when he entered the employ of the Vanderslice-Lynds Co. in 1904, with whom he remained until 1906, when he joined Ben C. Moore in the Moore Grain Co. Since 1908, when the name was changed to Moore-Seaver Grain Co., he has been with the company as treas., which is his official title at present.

He became a member of the Board of Trade in 1916 and has been an executive officer as first and second vice pres. the past two years, and prior to that time had served as a director and on numerous committees.

Mr. Gamage is married and has two daughters. He is vice pres. of the Grain Club, a member of the Kansas City Club, Hillcrest Country Club, Automobile Club and Chamber of Commerce.

Weevil in sacked beans are best exterminated by hydrocyanic acid gas, but the U. S. Bureau of Entomology states that this gas is useless for the control of rice weevil in sacked rice and corn.

Meal, feed and flour manufacturing corporations numbered 1,732 in the United States in 1921, according to income tax figures. Of these 672 reported a net income of over \$21,000,000 and paid \$3,000,000 income tax. The losses of the remaining 1,053 corporations aggregated slightly more than the net of the winners. Thus as a whole the industry lost \$3,000,000.



H. C. Gamage, Kansas City, Mo.
Pres.-Elect Board of Trade.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

Stockwell, Ind., Jan. 9.—Corn is of very poor quality.—Chas. S. Anderson.

Media, Ill., Jan. 9.—Corn crop is showing a light average yield.—Media Farmers Grain Co.

Menlo, Kan., Jan. 3.—We have about 12 inches of snow here, which is fine for our wheat.—H. E. Combs.

Atlanta, Ill., Dec. 28.—A severe sleet storm is causing some fear that the wheat will be damaged.—J. A. King.

(Gansel) Perry, Okla., Dec. 22.—Wheat prospects are fine this winter. The fields are covered with 3 inches of sleet and snow.—Freeman & Munger.

Falun, Kan., Jan. 9.—Prospects for the new wheat crop are not very encouraging. About 15% of the old crop is still in the farmers' hands.—R. E. Terry, mgr. Farmers Union Co-operative Grain, Livestock & Mercantile Ass'n.

Waterville, Wash., Dec. 22.—Dry seasons have accounted for several short crops here. Copious rains in November raised hopes of a better crop in 1925, altho they came too late to have much effect.—Davison Realty Co., Inc., agt. Seattle Grain Co.

(Glenwood Park) Kearney, Neb., Dec. 27.—The heavy snowfall will be of great help to growing wheat in this locality, as the ground was very dry. Without the snow much of the wheat would have been winter killed.—Farmers Grain & Live Stock Co.

Summit, Ida., Dec. 20.—The fall seeded acreage is light, probably not more than 50% of that sown in 1923. A noticeable demand is shown for the white variety of wheat for spring seeding. Nez Perce county is experiencing the coldest weather in its history.—Gifford Summit Warehouse & Commission Co.

Springfield, Ill., Jan. 7.—Snow was general in Illinois on the first day of 1925 and made a good cover except in the extreme south, 4 to 6 inches laying over much of the northern division. In the west central counties ice is still prevalent. The condition of winter wheat is problematical, but many believe it is safe. No husking has been done since the sleet and ice arrived on Dec. 18.—Clarence J. Root, meteorologist.

Iowa Co-operative Elevator Operators Will Meet.

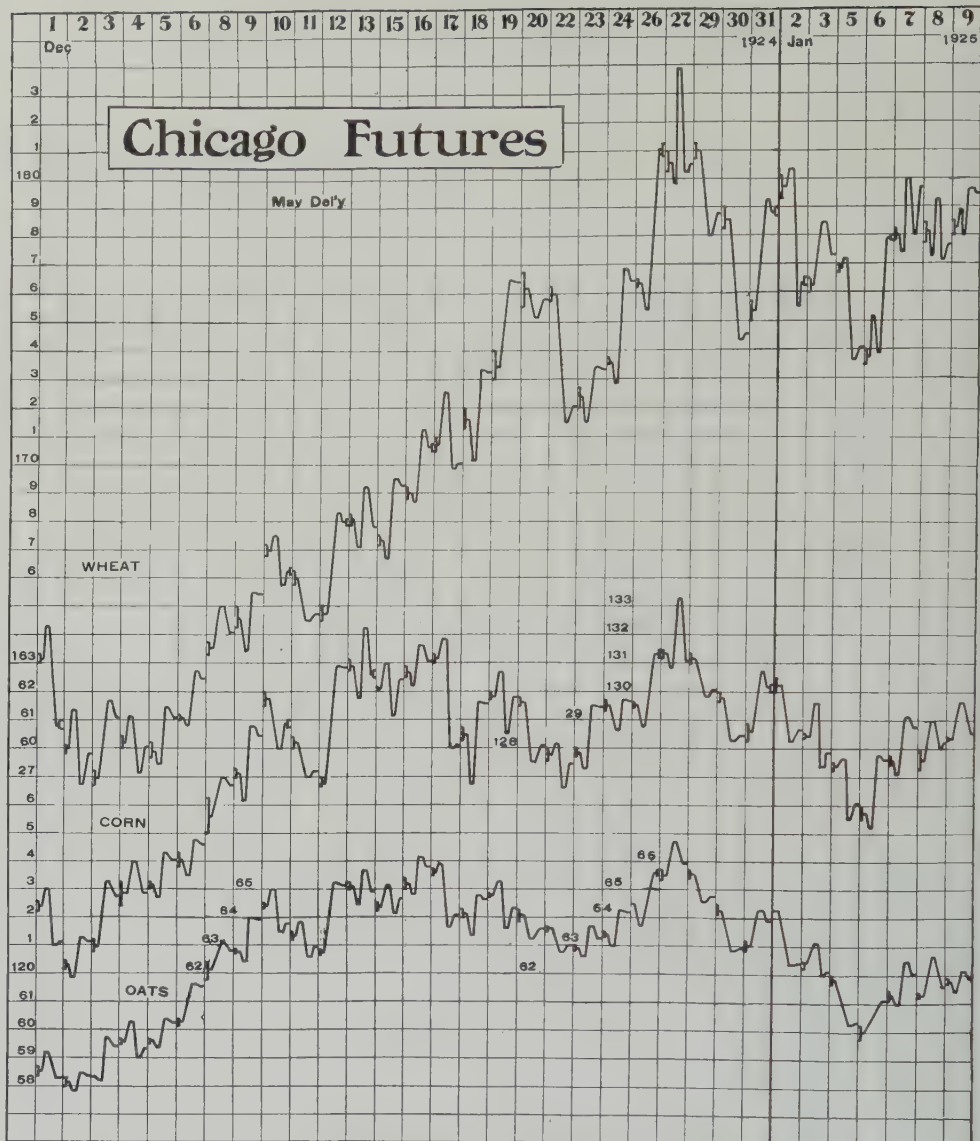
The Farmers Grain Dealers Ass'n of Iowa will hold its 21st annual convention at Fort Dodge, Ia., Jan. 20 to 22. Headquarters will be in the Wahkonsa hotel, where the managers' session also will be held. The regular program will be given in the Armory.

Chicago Clearings and Membership Range.

Chicago Board of Trade clearings during the year 1924 aggregated \$174,770,728. This is an increase of \$84,021,170, or 93.46% over the business done in 1923 which amounted to \$90,749,558. The largest share was done in December and the smallest in May.

Cars of grain inspected during 1924 totaled 146,210; against 122,398 cars in 1923, a net increase of 23,812. Receipts of flour and grain in 1924 equalled 327,638,000 bus., against the 1923 receipts of 300,587,000 bus., a net increase of 27,501,000 bus. Shipments of the same products in 1924 were 213,496,000 bus. against 197,769,000 bus. in 1923, an increase of 15,777,000 bus.

Chicago Board of Trade memberships more than doubled in price during 1924, ranging from \$3,500 to \$8,600 net to the buyer. A sale made at the close of the year was made at \$8,500, the buyer paying the 1925 dues.



Daily Closing Prices.

The daily closing prices for wheat, corn, oats, rye and barley for May delivery at the following markets for the past two weeks have been as follows:

MAY WHEAT.

	Dec. 26.	Dec. 27.	Dec. 29.	Dec. 30.	Dec. 31.	Jan. 2.	Jan. 3.	Jan. 5.	Jan. 6.	Jan. 7.	Jan. 8.	Jan. 9.
Chicago	181½	180½	178¾	174½	179	176½	177¾	174½	178	179¾	177¾	179½
Kansas City	172¾	172¼	171¼	166¾	170¾	168½	169½	166½	169¾	171¼	169½	171¼
St. Louis	179¾	179¾	178¼	173¾	177¾	175¾	176¾	178¾	176¾	178¾	177	178½
Minneapolis	177¾	176½	175½	170	175	172¾	174	171	174¾	176¼	174¾	175½
Duluth (durum)	178	178½	177¾	172¼	176¾	174¾	176¾	174¼	180¾	184¼	181	183¾
Winnipeg	188½	188	186¾	182¼	187¾	185¾	187¾	184¼	187¾	188½	187	188¾
Milwaukee	181	180¾	178¾	174½	178¾	176½	177¾	174¼	177¾	179¾	177¾	179¾

MAY CORN.

	Dec. 26.	Dec. 27.	Dec. 29.	Dec. 30.	Dec. 31.	Jan. 2.	Jan. 3.	Jan. 5.	Jan. 6.	Jan. 7.	Jan. 8.	Jan. 9.
Chicago	131½	131¼	130¾	128½	130	128¾	127¾	126½	127½	128¾	128½	128¾
Kansas City	124½	124¾	124	121¾	122½	122½	121¾	119¾	121¾	122¾	121¾	122¾
St. Louis	130¾	130¾	130¾	128½	130¾	128¾	127¾	126½	127¾	128¾	128¾	129
Milwaukee	131½	131¼	130¾	128½	130¾	128¾	127¾	126½	127¾	128¾	128¾	128¾

MAY OATS.

	Dec. 26.	Dec. 27.	Dec. 29.	Dec. 30.	Dec. 31.	Jan. 2.	Jan. 3.	Jan. 5.	Jan. 6.	Jan. 7.	Jan. 8.	Jan. 9.
Chicago	65½	65½	64¾	62¾	64	62½	62½	60¾	61½	62½	61½	62
Kansas City	65½	66	65	63	64	62½	62½	60¾	61½	62½	62	62½
Minneapolis	60¾	60¾	59¾	57¾	59½	57¾	57¾	56¾	57¾	57¾	57¾	57¾
Duluth (durum)	70½	70½	69¾	68¼	69½	68¾	69	67¾	68¾	68¾	68½	68¾
Milwaukee	65½	65½	64¾	63	64	62½	62	60¾	61	62	61½	61¾

MAY RYE.

	Dec. 26.	Dec. 27.	Dec. 29.	Dec. 30.	Dec. 31.	Jan. 2.	Jan. 3.	Jan. 5.	Jan. 6.	Jan. 7.	Jan. 8.	Jan. 9.
Chicago	158¾	157¼	155¾	150¾	154½	153¾	153¼	149¾	153½	155¾	154	155½
Minneapolis	148½	147¾	146½	141¼	145½	143¾	143¾	139¾	143¾	145¾	144	145½
Duluth (durum)	153½	152¾	150½	147¼	150¾	148¾	148¾	145	148½	151	149	150¾
Winnipeg	152½	152¼	149¾	144	149½	147¾	147¾	145	148¾	150	149¾	151½

MAY BARLEY.

	Dec. 26.	Dec. 27.	Dec. 29.	Dec. 30.	Dec. 31.	Jan. 2.	Jan. 3.	Jan. 5.	Jan. 6.	Jan. 7.	Jan. 8.	Jan. 9.
Minneapolis	95	95½	94¾	92	93¾	93	93¾	92¼	93¾	94¼	93¾	93¾
Winnipeg	94¾	98½	96¾	93¼	96½	95½	95¼	93¾	94¾	95½	94½	95

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Media, Ill., Jan. 9.—Corn is not moving as usual.—Media Farmers Grain Co.

(Gansel) Perry, Okla., Dec. 22.—We have shipped 8 cars of Texas red oats this season.—Freeman & Munger.

Sentinel, Okla., Dec. 26.—Wheat is freely moving from the farmers' hands at \$1.50.—Farmers Co-operative Ass'n.

Stockwell, Ind., Jan. 9.—Grain movement is very light in this section. Feeders are using nearly all the corn.—Chas. S. Anderson.

Summit, Ida., Dec. 20.—This station shipped 81 cars this season. The tonnage amounted to about two-thirds of the 1923 receipts.—Gifford Summit Warehouse & Commission Co.

Vancouver, B. C.—An aggregate of 10,039,541 bus. of grain passed thru this port between the beginning of the crop movement season and Dec. 27. This is nearly 4,000,000 bus. more than moved thru this port in 1923.

Superior, Wis.—Superior broke all records for grain receipts by totaling 101,640,252 bus. of receipts and 92,945,716 bus. of shipments, thru local elevators during 1924. Over 42,000,000 bus. of wheat was received and over 38,000,000 bus. shipped.

Washington, D. C.—Practically 84% of the acreage of corn in 1924 was used for grain, compared with 86% in 1923. The total area for all purposes was 105,012,000 acres, of which 87,838,000 were used for grain; 6,090,000 cut for silage; and 11,084,000 "hogged down" or used for forage. Considerable 1924 corn went into the silos, as unfit for husking due to being immature or frosted.—U. S. Department of Agriculture.

Seattle, Wash.—The Pacific Northwest is practically out of wheat. Early in the season, the Pacific coast shipped wheat to European countries via the Panama Canal at a price that was under a parity with the cost of shipment via the lakes to the Atlantic seaboard. This is done with. Furthermore, there are certain grades of wheat needed in the Northwest for family flour trade that are practically unavailable, even at tremendous premiums over the futures.—Wallace H. Foster.

Oklahoma City, Okla.—Railroads reported 33,615 cars of wheat moved in Oklahoma during the 5 months July to November, inclusive. Using 1,250 bus. as the average for each car makes 40,028,750 bus. Adding the reported 3,301,200 bus. delivered direct to the mills makes a grand total of 45,329,950, or 86.2% of the total estimated crop of 52,598,000 bus. Indications are that a little less than 14% of the 1924 wheat crop still remained in the farmers hands and in country elevators on Dec. 1.—Grain Dealers Ass'n of Oklahoma.

Barley Movement in December.

Receipts and shipments of barley at the various markets during December, compared with December, 1923, were as follows:

	Receipts		Shipments	
	1924	1923	1924	1923
Ft. Worth, cars	45	68		
San Francisco, tons	10,023	15,943		
Baltimore, bus.	651,107	23,178	696,181	58,285
Chicago, bus.	1,238,000	1,029,000	435,000	344,000
Duluth, bus.	228,809	101,871	920,956	255,516
*Ft. William, bus.	3,305,460		4,221,811	
Kans. City, bus.	10,500	165,000	18,100	58,500
Milwaukee, bus.	1,396,800	995,400	332,913	257,750
Minneapolis, bus.	2,217,670	1,814,140	1,970,360	
Montreal, bus.	229,922	242,580	18,425	296,889
New York, bus.	3,129,900		3,317,090	
Omaha, bus.	41,600	163,200	46,400	118,400
Peoria, bus.	109,200	262,600	44,800	76,600
Philadelphia, bus.	100,186	43,428	101,191	45,490
St. Joseph, bus.	3,500	17,500		12,250
St. Louis, bus.	108,800	156,800	26,720	22,910
Superior, bus.	147,010	107,488	317,527	39,828
Toledo, bus.	6,000			
Wichita, bus.	1,200	18,000	3,600	16,000

*4 weeks ending Dec. 27.

From Abroad.

Paris, France.—On Dec. 31, 1924, President Doumergue signed a decree to suppress import duties on wheat for bread purposes.

Refunding of the import duty on wheat imported into France has been authorized by a bill recently passed by the French Senate.

Swiss millers have sent representatives to Canada to purchase 1,000,000 bus. of wheat, which may be imported into Switzerland by private concerns, the government monopoly having expired Jan. 1.

Rome, Italy.—Abolition of the import duty on wheat and other cereals will be continued temporarily according to a decision of the Council of Ministers, while exportation of wheat flour will continue to be prohibited.

An effort to increase the Japanese wheat area is shown in the intention of Japan to raise her tariff on that commodity. Japanese farmers express the belief that higher duties would increase the domestic crop by 20%.

Warsaw, Poland.—The Polish government is charging the equivalent of \$3 on each 222 pounds of grain exported in order to check the export of bread grains. Polish crops are limited this year. The charge practically prohibits grain exports.

Bralia, Roumania.—Considerable dissatisfaction on the part of the exporters has resulted from the intention of the government to pass a new grain grading and storing law and create a trade monopoly for a company to be formed for handling grain. The contemplated company is to be capitalized at about \$2,500,000, 40% of which would be foreign capital, a sum generally considered inadequate for the installation of a complete bulk handling system.

Rye Movement in December.

Receipts and shipments of rye at the various markets during December, compared with December, 1923, were as follows:

	Receipts		Shipments	
	1924	1923	1924	1923
Ft. Worth, cars	9		1	
Baltimore, bus.	238,078	18,618	313,771	25,714
Chicago, bus.	894,000	154,000	4,561,000	151,000
Duluth, bus.	2,053,557	1,200,716	2,053,994	243,470
*Ft. William, bus.	436,399		323,268	
Galveston, bus.		46,714		
Indianapolis, bus.	10,000	11,000	6,000	2,800
Kans. City, bus.	12,100	85,200	59,400	13,200
Milwaukee, bus.	263,190	217,910	271,406	37,655
Minneapolis, bus.	430,800	599,010	284,430	
Montreal, bus.	75,661		74,133	234,426
New York, bus.	1,633,500		1,193,000	
Omaha, bus.	75,600	121,800	246,400	28,000
Peoria, bus.	3,600	8,400	7,200	2,400
Philadelphia, bus.	143,222	31,041	223,137	32,141
St. Joseph, bus.		7,500	7,500	
St. Louis, bus.	5,200	24,700	1,090	12,510
Superior, bus.	627,756	759,625	878,132	
Toledo, bus.	22,800		2,195	
Wichita, bus.	2,400			

*4 weeks ending Dec. 27.

Oats Movement in December.

Receipts and shipments of oats at the various markets during December, compared with December, 1923, were as follows:

	Receipts		Shipments	
	1924	1923	1924	1923
Ft. Worth, cars	93	112		
San Francisco, tons	1,424	2,922		
Baltimore, bus.	104,688	87,182	58,816	83,485
Chicago, bus.	6,081,000	6,223,000	3,011,000	3,819,000
Duluth, bus.	3,268,070	901,233	99,105	296,765
*Ft. William, bus.	4,213,023		3,088,081	
Indianapolis, bus.	526,000	514,000	542,000	372,000
Kans. City, bus.	477,700	1,205,300	223,500	715,500
Milwaukee, bus.	1,625,800	2,035,000	716,831	1,346,250
Minneapolis, bus.	3,771,330	3,355,470	4,095,470	
Montreal, bus.	1,572,149	1,231,852	180,255	377,677
New Orleans, bus.	108,550	25,770	108,550	
New York, bus.	1,064,000		784,000	
Omaha, bus.	1,008,000	1,892,000	973,000	1,758,000
Peoria, bus.	833,800	1,137,100	668,200	1,000,800
Philadelphia, bus.	139,771	416,862	39,866	202,833
St. Joseph, bus.	122,000	200,000	30,000	72,000
St. Louis, bus.	1,826,000	2,906,000	1,632,320	2,382,785
Superior, bus.	1,445,379	352,282	80,700	
Toledo, bus.	387,450		253,205	
Wichita, bus.	13,500	91,500	8,200	90,000

*4 weeks ending Dec. 27.

Spanish wheat market remains unchanged, the number of transactions registered far below normal. The character of the market is uncertain, with a further rise in the price of wheat due to rumors of the Government authorizing the bakers to increase the price of bread. Some possibility of it being necessary to import wheat before next year's crop is due, since the estimated 135,305,400 bus. of this year's production may not be sufficient. It is believed last year's large crop will make up any deficiency, however. Consumers are agitating propaganda to gain permission for importing foreign wheat, claiming present prices indicate that available wheat stocks are not sufficient to last thruout the year. It is impossible, however, to state definitely whether importation will be necessary or not.—Ass't Trade Commissioner Burke.

Attempts to Standardize Loaves of Bread.

A bill to establish standard weights for loaves of bread and to prevent deception as to weights has been introduced in Congress by Senator Capper, of Kansas. The bill makes further provision to protect consumers from the use of harmful ingredients in the manufacture of bread and would make sanitary wrapping compulsory. In introducing it Senator Capper declared that consumers of bakers' bread pay \$300,000 a day for bread they never receive. Another fool attempt to regulate business which would prove futile. The dear Senator should teach the lazy housewife how to bake her own bread and save one hundred million annually.

Corn Movement in December.

Receipts and shipments of corn at the various markets during December, compared with December, 1923, were as follows:

	Receipts		Shipments	
	1924	1923	1924	1923
Ft. Worth, cars	592	257		
San Francisco, tons	1,247	2,133		
Baltimore, bus.	80,216	358,549		158,571
Chicago, bus.	12,023,000	12,046,000	2,878,000	4,360,000
Duluth, bus.	13,114	1,069,686	6,285	847,149
Indianapolis, bus.	2,091,000	1,425,000	1,764,000	1,135,000
Kans. City, bus.	4,742,500	2,713,750	541,250	1,301,250
Milwaukee, bus.	463,760	2,971,840	146,980	1,686,761
Minneapolis, bus.	1,421,080	3,883,570	933,680	
Montreal, bus.	13,750	58,557		11,422
New Orleans, bus.	201,395	390,963	201,395	
New York, bus.	63,000			
Omaha, bus.	1,576,400	3,446,800	544,600	2,601,200
Peoria, bus.	1,950,900	2,710,700	1,129,700	1,871,850
Philadelphia, bus.	85,217	250,727		42,856
St. Joseph, bus.	1,222,500	1,150,500	639,000	733,500
St. Louis, bus.	2,729,852	4,521,594	1,334,170	1,966,790
Superior, bus.	14,544	614,561	6,286	477,000
Toledo, bus.	455,000		238,125	
Wichita, bus.	506,400	681,600	330,000	227,200

Wheat Movement in December.

Receipts and shipments of wheat at the various markets during December, compared with December, 1923, were as follows:

	Receipts		Shipments	
	1924	1923	1924	1923
Ft. Worth, cars	823	289		
San Francisco, tons	4,849	3,823		
Baltimore, bus.	2,663,104	2,160,688	918,307	2,176,052
Chicago, bus.	2,638,000	1,365,000	3,238,000	1,286,000
Duluth, bus.	9,030,854	2,962,862	10,452,652	2,750,335
*Ft. William, bus.	24,987,148		32,328,984	
Galveston, bus.	4,455,999		4,209,598	
Indianapolis, bus.	329,000	180,000	220,000	168,000
Kans. City, bus.	3,346,650	4,754,700	4,973,400	2,231,550
Milwaukee, bus.	121,800	242,200	606,795	250,392
Minneapolis, bus.	9,354,410	9,976,210	3,865,560	
Montreal, bus.	1,619,604	2,954,058	4,057,459	4,578,755
New Orleans, bus.	2,676,880	367,680	2,546,903	
New York, bus.	7,671,200		6,362,000	
Omaha, bus.	1,332,400	1,934,800	1,810,200	1,401,400
Peoria, bus.	69,000	163,900	49,200	147,600
Philadelphia, bus.	4,048,013	3,787,128	4,002,726	3,725,349
St. Joseph, bus.	942,200	624,400	434,000	184,800
St. Louis, bus.	2,875,104	2,271,054	2,925,980	1,721,800
Superior, bus.	3,949,421	1,551,404	1,541,807	303,931
Toledo, bus.	1,493,700		213,800	
Wichita, bus.	1,156,800	1,292,000	871,200	648,200

*4 weeks ending Dec. 27.

Grain Dust Explosions.

The year 1924 began with an explosion Jan. 3 that killed 35 men; but the extent of this disaster was not approached in the five other dust explosions of the year, altho the financial loss by the explosion of Sept. 2 was considerable.

The dust explosions of 1924 were far more serious than the 7 explosions of 1923 in loss of life and property. Grain dust, mill dust and starch dust contributed, as in other years, to the destruction. Aside from the one explosion in which starch dust lived up to its reputation as a destructive force most of the damage was done by the fire that accompanied or followed the explosions.

The record of the year is one to encourage insurance inspectors and grain elevator architects to redoubled effort toward prevention of these disastrous explosions; and is a warning to elevator superintendents and owners to keep their houses clean.

The studies of engineers already have borne fruit in the improved design of all new terminal elevators and some valuable conclusions are expected from research work by insurance engineers of long experience on the nature of elevator dust, one point that will be brot out soon being a demonstration that the fine dust is infinitely more hazardous than the coarse dust.

Following is a list of all known explosions during the past four years, forming, with the list published in the Journal Apr. 10, 1921, a complete record for the 47 years past.

Oct. 30, 1904, Buffalo, N. Y.: A dust explosion without fire at 10:45 Sunday morning was alleged by the owner of the Ontario Elevator to have been the cause of the complete collapse of the house. One man walking toward the elevator was lifted off the ground and blown 40 ft., receiving internal injuries. Loss, \$100,000.

July 5, 1921, Baltimore, Md.: In one bin, while being filled with corn at 2 p. m., an explosion of dust cracked the bin wall for its entire height of 60 ft. and blew up a section of the floor above it, in the Port Covington Elevator of the Western Maryland Railroad. From above the explosion was propagated down the shaft containing the passenger lift and demolished its hollow tile walls. Three men were slightly burned and the loss was \$3,000.

Oct. 3, 1921, Yukon, Okla.: An explosion of flour dust occurred when an employe opened a flour bin at 11 p. m. in one of the mills of the Yukon Mill & Grain Co. and the fire destroyed that building. Loss, \$300,000.

Oct. 12, 1921, Buffalo, N. Y.: A dust explosion and fire in the leg of the Great Eastern Elevator operated by the American Linseed Co. did damage estimated at \$5,000.

Oct. 27, 1921, Montreal, Que.: At 10:57 a. m., a violent but localized explosion in a steel elevator leg of the Harbor Commissioners' Elevator No. 1 damaged the upper floor of the building and was followed by an explosion in a second elevator leg. The bin walls were not damaged but some pieces of the iron siding of the cupola were blown off. Two men were burned about the face and arms. Loss, \$5,000.

Nov. 22, 1921, Buffalo, N. Y.: Buckets on an elevator belt struck and burst electric lamp bulb lowered into the leg casing on an extension cord, igniting the dust, and blowing the roof off the feed mill of the H-O Co. Loss, \$7,500.

Mar. 15, 1922, Kansas City, Mo.: A dust explosion, unique in that two minor explosions followed and put out the fire started by the main explosion, occurred in the plant of the Midland Flour Milling Co. Damage amounted to \$10,000. The large windows saved the walls.

Mar. 25, 1922, Hutchinson, Kan.: Fire was discovered in the elevator of the Rock Mill & Elevator Co. about 1 p. m. Before the fire department arrived a dust explosion wrecked the building. Loss on grain and building totaled about \$175,000.

Aug., 1922, Minneapolis, Minn.: A dust explosion in the plant of the Atkinson Milling Co. occurred when two employes cleaned a bin with an extension light. The employes were seriously injured. Damage was estimated at \$10,000.

Dec. 20, 1922, West St. John, New Brunswick, Can.: A dust explosion in one of the grain bins of the Canadian Pacific Railway Co.'s elevator blew out one end of the cupola. The concrete floor over two of the bins was shattered by the blast and two other bins were partially damaged. Fire immediately started in four of the bins, but was quickly extinguished.

Dec. 27, 1922, Kansas City, Mo.: A dust explosion at 1:10 p. m. wrecked the plant of the Schreiber Feed Manufacturing & Cereal Co., injuring 27 employes, some seriously. Fire immediately following destroyed the building. Loss, \$125,000.

Mar. 31, 1923, Chicago, Ill.: An explosion in the Mid-West Elevator, owned by the Mid-West Elevator Co., occurred in a bin above a drier containing 6 feet of damp oats. Two men had become asphyxiated the day before when they had entered the bin to open the choke. Both died, it is supposed, from the effects of the carbon monoxide gas present, in spite of all efforts to resuscitate them. A little over 24 hours later the explosion occurred. Loss on grain, \$100; on bin, \$25.

June 23, 1923, Roby, Ind.: An explosion wrecked the corn elevator of the American Maize Products Co. Five men were working in the building at the time, four of whom died and one recovered from severe burns. Property loss was confined to the elevator building, 30x50 ft., which was the workhouse for the adjacent concrete storage bins, and was built of brick with walls nearly two feet thick at the base and 90 feet high. The force of the explosion bulged these walls and entirely destroyed the west portion. No fire resulted.

July 31, 1923, Decatur, Ill.: Fire in the grinding room of the feed plant of Staley Mfg. Co. caused flames sufficient to travel thru 18-inch vacuum dust collector pipes to other parts of the building. Several dust explosions followed, tearing the roof from the building and blowing out an end of an adjacent dust house. No one was injured. The blasts occurred at 5:30 p. m. when the day shift had left and the night shift had not yet arrived.

Jan. 18, 1923, St. Charles, Ill.: A nail in a feed mixer caused sparks which resulted in a dust explosion in the plant of the Pyramid Milling Co. The plant was completely destroyed by the fire which followed. Damage was estimated at \$50,000.

Apr. 20, 1923, Argo, Ill.: A dust explosion occurred shortly after 8 a. m. in the starch house of the Corn Products Refining Co. Fire followed. Twelve men were working in the house, one of whom escaped unhurt, 3 were killed and 8 burned and injured. Damage to the machinery and the 2-story building amounted to \$5,000.

May, 1923, Bemus Point, N. Y.: Backfire from a gas engine caused a small dust explosion and a fire in the feed mill of S. E. Lord & Son. A fire door prevented the spread of flames.

May 8, 1923, Buffalo, N. Y.: A dust explosion, followed by fire, wrecked the feed building of the H-O Cereal Co. Two men were seriously injured.

Jan. 3, 1924., Pekin, Ill.: Two dust explosions, one immediately following the other, occurred in the starch house of the Corn Products Refining Co. at 3:20 a. m. The plant was kept scrupulously clean by men hired for that purpose and fire protection was adequate. But no mechanical means had been provided for the constant removal of dust. The 11:00 p. m. shift was at work when the explosion occurred. Over 35 men were killed and many more seriously injured. The brick and concrete starch powder house was completely shattered and several other buildings were partially destroyed by the force of the explosion and the fire that immediately swept after it.

Apr. 17, 1924, Kansas City, Mo.: The Rock Island elevator, operated by Davidson Mill & Elevator Co., suffered a fire caused by an electric spark igniting dust, which resulted in an explosion. Loss, \$65,000.

Sept. 2, 1924, Milwaukee, Wis.: A dust explosion caused by a spark resulting from contact between the iron buckets of an elevator leg and some foreign substance started a fire which totally destroyed the plant of the Krause Milling Co. at 9 a. m. Loss, \$1,500,000.

Sept. 8, 1924, Buffalo, N. Y.: Fire starting in the cupola of the Exchange Elevator was accompanied by a dust explosion and destroyed the structure. Twelve men working in the building escaped. About 100,000 bus. of grain

was ruined in the blaze. Loss was estimated at \$65,000 to \$100,000.

Nov. 24, 1924, Marietta, Kan.: A small explosion did considerable damage in the cupola of the elevator belonging to the Marietta Stock & Grain Co., when the cob house caught fire. The house was completely destroyed.

Dec. 1, 1924, Montreal, Que.: A dust explosion at 10:23 a. m. occurred in the Harbor Commission's Elevator B at Windmill Point, said to have been started by a spark. Fire resulted, but was quickly quenched. Eight employees were injured and one killed. Considerable iron siding was blown off. Damage to elevator amounted to about \$50,000.

Members of the Montana Wheat Growers' Ass'n, who have marketed their wheat thru the pool operated by that organization, are expressing considerable dissatisfaction at receiving from 8 to 14 cents per bu. under the local elevator price on the date delivered. Charles Kleinman, a wheat grower at Scobey, Mont., recently published a statement declaring that selling his 1924 crop thru the pool cost him \$306.25. Why do any farmers continue selling thru a pool?

December Sales of Futures.

During the month of December the combined sales of all grain futures covered by transactions on the Chicago Board of Trade reached a total of 2,443,893,000 bus., or an average of 93,995,000 bus. daily, for the twenty-six trading days in the month. On eleven days the volume of trading was in excess of 100,000,000 bus. The December total for Chicago is the largest volume of transactions in any single month during the past four years. It likewise represents 89 per cent of the total trading in grain futures for all "contract markets," which is slightly larger than usual.

WHEAT transactions on the Chicago Board of Trade during December were represented by sales of futures aggregating 1,335,088,000 bus. This volume has been exceeded only twice during the past four years, March 1922 with 1,477,112,000 bushels, and October 1924 with 1,352,496,000 bus. Considering all "contract markets" with a total trading in wheat of 1,528,040,000 bus., more than 87 per cent was represented by transactions on the Chicago Board of Trade.

CORN trading for the month at Chicago was 651,255,000 bus. During the past four years this volume was exceeded three times, August 1924 with 692,910,000 bus., January 1921 with 661,267,000 bus., and June 1921 with 661,946,000 bus. The daily average volume at Chicago was 25,048,000 bus. and at all "contract markets" 26,711,000 bus. with a total of 694,484,000 bus. for the month.

OATS trading for December aggregated 372,404,000 bushels which is considerably larger than the trading for any single month during the past four years.

In all respects the volume of trading at Chicago during December 1924 was much greater than during December 1923. In case of wheat more than three times; corn, more than two and one-half; oats, more than seven and one-half; rye, nearly five and one-half times larger than last year. For all futures, all grains combined, the volume was more than three times greater than for December last year.

During December, the deliveries at Chicago on December contracts were: Wheat, 7,919,000 bus.; corn, 1,920,000 bus.; oats, 4,773,000 bus.; rye, 8,594,000 bus.; total, 23,206,000 bus.

On the first day of the month the deliveries were 10,232,000 bushels or 44 per cent of the total. During the month some of the warehouse receipts changed hands several times, in one instance as much as eleven times, so that the totals for the month are in excess of the actual grain involved.

At Winnipeg deliveries on December contracts aggregated 1,481,000 bus. wheat, 7,187,000 bus. oats, 2,850,000 bus. barley, 1,394,000 bus. flaxseed and 1,301,000 bus. rye.

The B. & O. Elevator at Baltimore



Fig. 1—B. & O. Elevator. Showing Conveyor Galleries, Workhouse, Annex and Drier.

Baltimore has such a wonderful harbor, so many miles of deep water frontage and is made regularly by the boats of so many large lines of ocean steamships it has long been favored by grain exporters. Its favorable freight differential has helped to attract general merchandise as well as grain. Last year Baltimore received 35,000,000 bus. of grain against 43,800,000 during 1923, while its total grain exports for 1924 aggregated 25,300,000 bus. against 43,100,000 bus. for 1923.

The piers of the Baltimore & Ohio Railroad alone provide berthing space for 30 ordinary size ocean vessels. The channel and the piers have a 35-ft. depth of water, and the tide is only 14 inches so the vessels come in large numbers and provide cheap transportation for grain which can be loaded quickly.

The port has three modern fireproof export elevators with storage room for over twelve million bushels and handling facilities that make easy work of loading 3,000,000 bus. per day into ocean going steamers. It also has two small elevators for handling domestic shipments.

The burning of the B. & O. R. R.'s elevators "B" and "C" left Baltimore's principal trunk line without any facilities for handling export grain, hence its officials hastened to get plans and specifications for the latest, the safest and the fastest grain handling plant obtainable. No expense has been spared to make it perfect in every desirable feature and this last word in up-to-the-minute grain handling facilities stands a pleasing testimonial to the enterprise of the B. & O. R. R. and a credit to the ability and skill of the engineers and builders who designed and erected it.

The completion of this rapid handling plant will help to make the Atlantic seaboard's nearest port more attractive than ever to the shippers of the grain surplus states of the middle west.

The new elevator was built to take the place of Elevators "B" and "C" which were burned July 2, 1922. Back in 1872 the first elevator of the Baltimore & Ohio at Locust Point was completed. Elevator "A" had two dock legs, four receiving legs, four shipping legs and a storage capacity of 500,000 bus. It was destroyed by fire on Oct. 4, 1891. The elevators struck by lightning and burned were built in 1874 and 1881. Their total storage capacity was 2,500,000 bus. While not up-to-date

they had served satisfactorily. In one year the old elevators shipped for export over 52,000,000 bus. of grain. Elevator "B" was a metal-covered frame structure, "C," built in 1881, was also of frame, but covered with brick and slate. They were of the dock instead of the gallery type. To these houses the B. & O. R. R. delivered an average of 26,911,000 bu. each year for the six-year period, 1916-1921.

The new grain handling plant of the Baltimore & Ohio Railroad at Locust Point, Baltimore consists of a reinforced concrete working house and storage annex, a large drier house, dust house and a marine tower with steel conveyor galleries and track shed. The office building, the welfare building, the oil house and the grain door reclamation shop are of concrete and brick construction.

The track yard was laid out to permit the use of a loop track system by which the loaded cars coming from the receiving yard will be delivered at the west end of the plant and the empty cars taken away by gravity at the east end to the "empty" yard. The receiving yard has a capacity of 320 cars, the empty yard of 105 cars, the load tracks in the car puller zone 80 cars and the drip shed 16 cars, total car capacity, 521.

Immediately adjacent is the company's large Locust Point yard the track of which can be used in emergency. Room for the tracks was gained by setting the elevator back 500 feet from the Patapsco River, which the elevator tracks parallel. The result of the loop track system is a continuous cycle of movement of cars in one direction thru the grain-unloading shed. A train of 100 carloads can be inspected, unloaded and placed in store in a little over three hours, the actual grain-receiving capacity being 32 carloads per hour. If the carload arrives in the morning the grain dealer, ordinarily, should receive his warehouse receipt before the closing of the banks the same day. To the shipper it means quicker settlement for his product; to the carrier quicker release of its box cars.

The Track Shed is in two parts, an outer drip shed and an inner unloading shed. The unloading shed which houses the car dumpers is 104 ft. wide, 24 ft. high and 160 ft. long. The four dumper tracks are spaced 20 feet centers, but the allowance of space for each dumper is doubled by setting two of the dumpers so far ahead of the other two as to avoid interference, the center lines of the unloaders being 64 ft. centers. The hoisting drums and motors of the unloaders are housed in a second story.

Each of the Metcalf Car Dumpers has an unloading capacity of 8 cars per hour, and each dumps car's contents into a receiving pit of carload capacity. From the pits the 42-inch conveyor belts carry the grain to the boots of the four receiving legs each of which has an

elevating capacity of 25,000 bu. per hour.

The Metcalf Car Dumpers at this elevator find their greatest usefulness, provision having been made thruout the receiving operation to provide handling capacity consistent with the dumping capacity. For this reason the Fairbanks Co. developed the 2,500-bu. scale for this elevator, requiring 3,000-bu. garner, with 48-in. valves and turnheads for discharge of scales.

The operation of the dumper proceeds with surprising ease. Not only is the platform, supporting the car, raised clear of its supports, until it is suspended approximately eight feet above them, then tilted at one end with a corresponding lowering at the other, and the cycle repeated as often as desired, but by the exceedingly simple device of running the two hoisting drums which elevate the back side of the car a little faster than the two which elevate the front side of the car, a side tilt is obtained without any additional machinery whatever other than a difference in the pitch diameter of the pinion operating the drum on the two sides. In addition to the side tilt, the ram which pushes the grain door into the car is also operated by a cable anchored at one end of the floor of the pit below the dumper, led around a system of sheaves and finally attached to a swinging arm. As the platform is elevated, the ram is pushed against the grain door with a force of 15 tons.

The two clamping carriages are operated by a screw shaft extending the entire length of the platform, the shaft being driven by a 10-h.p. motor, located in the center portion and beneath the platform. As soon as the screw shaft commences to revolve, the two carriages at opposite ends of the platform (each containing one of the clamps) are draw towards each other.

Four hoist drums are provided, each being situated directly over a suspension sheave on the platform. The pair at either end are driven by a single shaft, both of which shafts are in turn driven by worm gears with a worm on a longitudinal extension of the motor shaft running at 1,200 r.p.m. The pair of tilt drums are operated in a similar way from the tilt motor.

The system of cables is, in effect, an endless one around the hoist and tilt drums; when the hoist drums are operating, the tilt drums are anchored and vice versa.

The counterweights act directly upon the hoist and tilt drums, and are of sufficient magnitude to necessitate the platform and empty car being wound down by the hoist drums, thus equalizing the load on the motors and avoiding any heavy peak load.

The electrical control is so wired as to make it impossible to perform the required operations out of sequence, i.e., it is not possible to raise the platform until the clamp motor has stalled, or to tilt the platform until it has been

raised to the desired height.

Primarily designed to expedite the unloading, other advantages flowing from the employment of the Metcalf Car Dumper are a reduction in the labor cost of unloading from \$1.20 to 35 or 40 cents per car; and, as in this instance, where the use of dumpers was contemplated before the structure was planned, a reduction in the size of the track shed and a raising of the basement level.

Under the power shovel track in the receiving shed are five receiving hoppers, four discharging on car dumper belts and one direct to a leg having 10,000 bus. per hour elevating capacity. The power shovel track is for the purpose of unloading bulkhead or other cars which can not be unloaded by the dumpers. The one hopper under this track discharging direct to leg is for salvaged grain, the leg leading to the driers, so that this class of grain may be kept out of the elevator proper until dried.

The workinghouse of the new plant is of reinforced concrete 61 x 240 feet and 206 feet high above the track level. It stands between the storage annex and the drier house, being separated from each by an open court. At the north end of the drier house is the track shed and beyond it the drip shed. The plant is supported by a foundation of 7,000 concrete piles.

Specifications for finishing concrete surfaces were unusually rigid and included a requirement that all of the inner as well as the outer surfaces of the bin walls be smoothed by hand rubbing as the construction work progressed.

BASEMENT: In workhouse basement, which has an 18 ft. ceiling are the boots (See Fig. 18) of 20 legs and the heads of 11 conveyor belts together with the motors operating them. Four of the belts bring grain to the receiving legs from the pits under the track shed and 7 bring grain to the shipping legs from the bins of the storage annex. Spouting is also provided for diverting grain from the bins, cleaners and clippers on the floor above to the boots of the different legs.

The usual tunnels for belts between work house and storage house have been eliminated

and the space under tracks between these buildings has been made a part of the work house basement with a fire wall separating same from the storage house.

THE FIRST STORY with its large window area and 25 foot ceiling contains the foreman's office, a men's room with all comforts and conveniences, fire and dust-proof switch rooms, 8 No. 12 Invincible Warehouse Separators, 2 No. 10 Invincible Oat Clippers, 6 42-inch conveyor belts running under the row of shipping bins, and movable spouts for running grain from the bins above to boots, cleaners or conveyor belts. Each pair of cleaners and clippers has fixed spouting from two bins. The screenings and dust from the machines go thru the floor to hoppers discharging into an 8-inch pneumatic conveyor pipe leading to the dust house.

THE BIN STORY: The 97 rectangular bins of the workinghouse providing storage room for 800,000 bushels are arranged in four rows as is shown by Fig. 5. The two rows of bins on the storage annex side of the house are 78 feet deep, while the other two rows are 87 feet deep. The first and third row of bins as well as the end bins are 15 ft. 6 ins. by 16 feet while the second and fourth rows are cut up into many small bins. The first row of 15 bins has storage room for 230,000 bus. and is designed to hold grain ready for shipping until the ocean steamer is ready to receive it.

THE CUPOLA of the workinghouse is only 46 feet wide above its first story, but the same length as the rest of the house. Its wall space is largely devoted to swinging windows so each story is well lighted and can be thoroughly ventilated. Observe Figs. 1 and 3.

THE DISTRIBUTING STORY of the cupola which has an 18 ft. ceiling, is occupied by 13 20-inch Mayo spouts and some fixed spouting clearly shown in Figs. 4 and 5. Grain can be received from the reversible transfer belt and spouting of the story above and diverted to the ten 48 inch receiving belts delivering grain to the storage annex, spouted to the drier house, the car loading spout or to any bin in the working house. Grain can also be spouted direct from scale hoppers to shipping bins or

to receiving belts of annex. A motor with drum wire rope and chair are provided to lower men into the bins. The disc separator is located on the bin floor and is served by a garner of 4,200 bus. capacity, permitting the operation of this machine with practically no attention.

The next story which has a 16 foot 6 inch ceiling is occupied by a 48 inch reversible transfer belt running the length of the house and receiving grain from any of the scalehoppers above as is shown by Figs. 2 and 5, through two traveling belt loaders. It discharges grain through a 4-pulley Webster Terminal Elevator Tripper to any of the spouts below. It is operated by a 55 horsepower motor connected to one end. Grain may be spouted direct from the scale hoppers to the outside rows of bins without going to the transfer belt.

THE SCALE STORY (see Fig. 2) has a 21 foot ceiling and is occupied by twelve 2,500 bu. specially constructed Type S Fairbanks scales. All of the hoppers are cylindrical and of steel. These Type S scales differ somewhat from previous designs of hopper scales in that the suspension bearing principle previously used in railroad track, auto truck and depot scales has been applied to the hopper scale. In applying these principles which lead to accurate weight and easy inspection and maintenance, features were also included by the designer to make the scale simple and easy for the elevator builder to install. The scales and their beams set on the same concrete floor, so that it is possible for the weigher to see his scale at all times and the inspectors to walk around the scale parts for examination.

The levers in the scale are all loaded on their true center line, thereby using the same principle which has been demonstrated so successfully in other lines of scales by the same manufacturer. The suspension bearings provide that such disturbances as are given to the hopper by movement and pounding of the hopper slides in removing the last traces of grain from the hopper do not in any manner disturb the position of the bearings on their knife edges, which insures that the scales will stay accurate and hold their balance.

The beam outfit, pillars and shelf are all metal, which support an upright beam stand having compensating bearings engaging the beam pivot. In order to speed up the operation of the scale and to make it unnecessary for the weighman to move them by handling counterpoise weights, an improved weight lifting device was attached, so that within a few seconds the counterpoise weights are mechanically lifted off the beam, and the weighman can always check the balance of the scale before weighing another draft. This constant checking of the balance insures that there is no for-

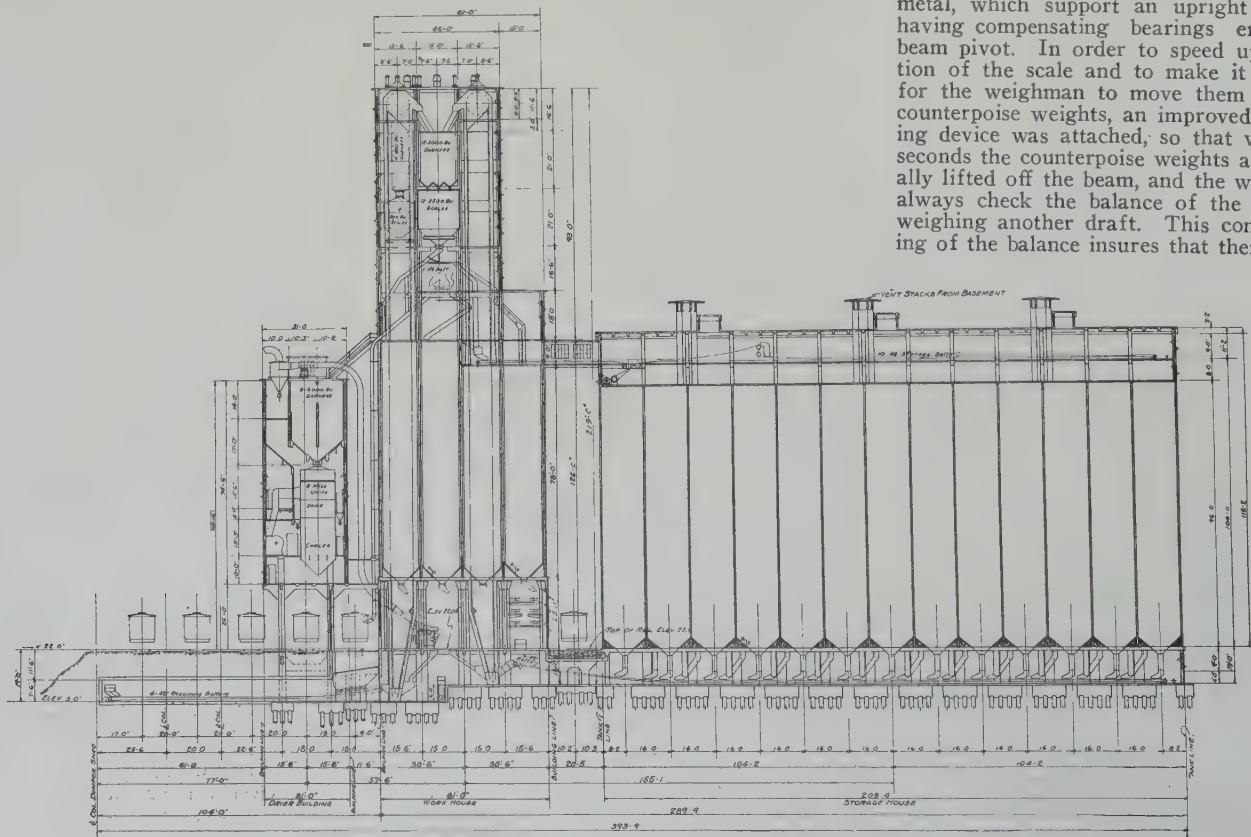


Fig. 2—B. & O. Elevator. Longitudinal Sectional View of Track Shed, Drier House, Working House and Annex.

eign matter such as caulking paper, bags, or grain buckets which sometimes break off the elevating belts are left in the hopper to cause an error to appear in succeeding loads of grain.

The beam itself is an improvement in that the notches are on the bottom side of the beam, thereby preventing the lodgment of dust or other foreign material in them which would cause errors in the setting of the poise. Weight of grain is printed on weigh ticket. Each hopper is provided with an automatic counter to check the number of drafts handled.

In addition to the battery of 12 2500-bu. hopper scales, are 4 800-bu. Fairbanks hopper scales for the weighing of grain to and from the driers.

Grain from the large scales is directed by fixed spouting to shipping bins, storage conveyors, driers, car spout and bins in the working house. Fixed spouting from these scales is provided to reach the transfer belt on the floor below for the movement of grain to various sections of the working house and to the Mayo Spouts on the bin floor. The large scales are equipped with 48-inch rotary valves.

This arrangement of fixed spouting is expected to eliminate the expense and delay of spout changing and increase the efficiency of operation.

Each of the four small scales discharge thru direct spouting to two telescope spouts, transfer belt and adjacent spouts to two drier garners.

THE GARNER STORY has a 21 foot ceiling and is occupied by 12 concrete hoppers of 3,000 bu. capacity and 4 of 1,800 bu. capacity.

The 12 main garners have special roller bearing plate and angle valves, and the 4 small garners have 36-inch rotary valves. Each garner discharges into a scale hopper immediately below it. The scale hopper tops are made dust-proof by cotton duck attached to garner and left free at bottom.

THE TOP STORY is occupied by the heads of the 20 legs, their individual motors and drives. Each leg is provided with a vent out through the roof. The four receiving legs and the seven shipping legs are equipped with two rows of 8x8x20 inch Buffalo buckets staggered, on a 7-ply 42 inch rubber belt running over a 96 in. head pulley. The four drier legs are equipped with 7x7x16 in. buckets running over an 84 in. head pulley. The four separator legs and the one clipper leg are equipped with 7x7x18 buckets running over an 84-in. head pulley. All head pulleys are provided with Webster Backstops of special design. All boots are equipped with automatic takeups and Hyatt roller bearings. All leg casings are of No. 14 steel.

The receiving and shipping legs are equipped with governors on the idler pulley shaft which are electrically connected to the compensator for the conveyor belts serving these legs so that when the speed of the legs fall below normal the motors of the tributary conveyor belts are automatically thrown out. If the speed of the leg is further reduced the governor will trip the second switch and thereby throw out the motor driving the leg. It is expected by this means to eliminate the possi-

bilities of a choke causing serious friction on the head pulley.

All receiving and shipping elevator heads can discharge grain to either of two garners by means of Metcalf switch valves operated by ropes from scale floor. The separator, clipper and drier leg heads have 3-way turnheads to main garner, small garner, or to by-pass to telescope spouts on bin floor.

A system of leg signals operates from first to scale floor of working house. Each shipping, receiving, drier and cleaner leg has an independent green and red light. Each leg also has a bell signal. The seven storage basement belts have an identical system of signals.

The receiving and shipping legs are operated by 175 h.p. motors, separator and clipper legs by 75 h.p. motors and the drier legs by 50 h.p. motors.

The Fawcus Herringbone Gear Drives on the 20 elevator legs consist of a chrome nickel forged steel pinion integral with shaft supported on Hyatt Roller Bearings mounted in bearing blocks which are removable to facilitate replacement of the pinion. The gear is cast steel with Fawcus cut herringbone teeth mounted in split bronze sleeve bearings. The gears are completely enclosed in a cast iron housing made of three sections with horizontal joints at the center line of the pinion and the gear.

The head shafts are mounted on split bronze sleeve cast iron pedestals which rest on concrete piers erected on the workhouse floor. On the drive end these shafts are connected to the

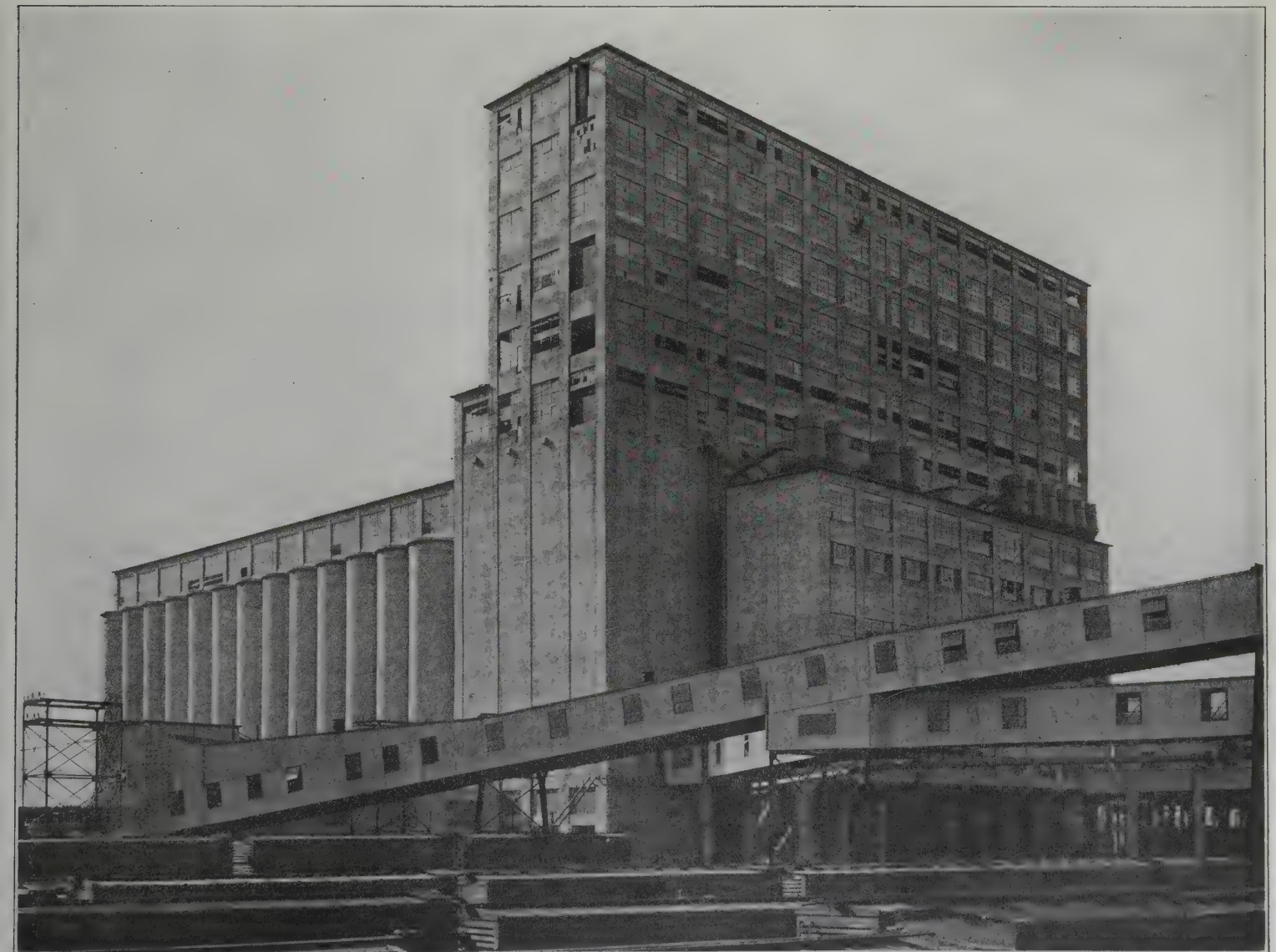
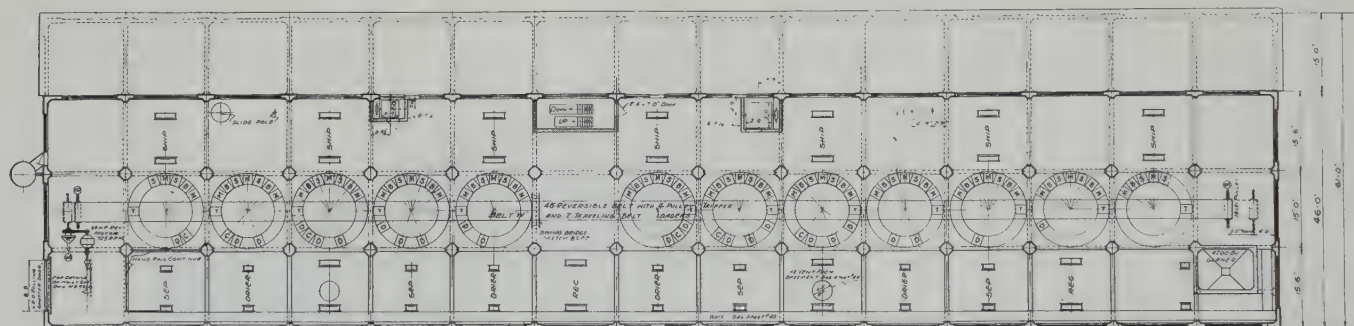


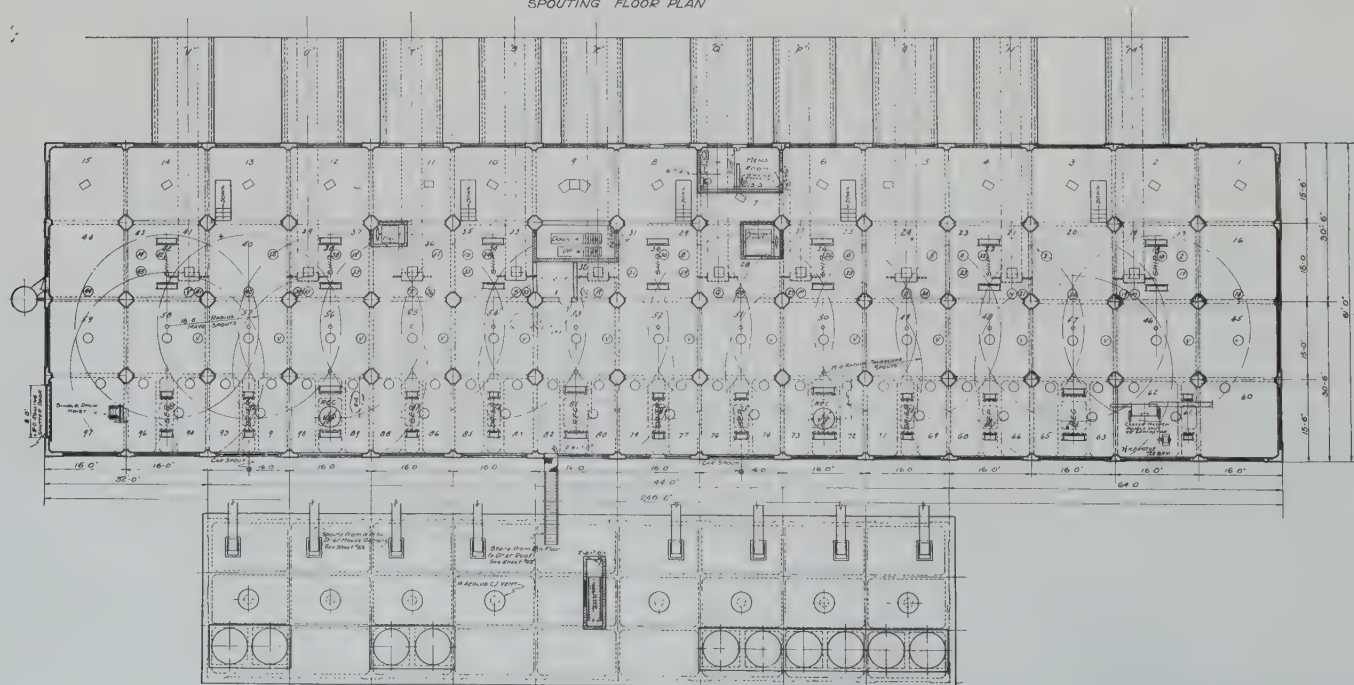
Fig. 3—B. & O. Elevator. The 3,800,000 Bu. Fireproof Elevator of the Baltimore & Ohio R. R. at Baltimore.



Fig. 4—B. & O. Elevator. On Bin Floor of Working House are 13 Mayo Distributing Spouts Each Tributary to Many Different Bins.



SPOUTING FLOOR PLAN



BIN FLOOR PLAN

Fig. 5—B. & O. Elevator. Distributing Floors of Working House. Roof of Drier House at Bottom.

gear shaft of the Fawcus herringbone gear reduction unit with Fawcus misalignment coupling.

The ratio of gear reduction is 17.5 to 1 on the larger legs and 25.4 to 1 on the smaller ones, the head shafts running 27½ r.p.m.

The larger drives with their head shafts and couplings weigh about 12½ tons, the smaller ones about 8 tons.

Two passenger elevators give access to the various floors, one reaches the top floor working house and one runs between bin floor and top floor. Slide poles are provided between scale floor and bin floor.

The Storage Annex, 20 ft. 5 inches to the west of the working house is of reinforced concrete, 209 feet by 225 feet, and 113 ft. high. Its 182 cylindrical tanks are 15 ft. 4 ins. inside diameter and 96 ft. high, with a capacity of 13,572 bus. each. They are arranged in 13 rows of 14 tanks to the row. The 153 interspace bins have a capacity of 3,478 bus. each, making the total storage capacity 3,000,000 bus.

The storage annex design permits of the addition of 6,000,000 bus. of storage tanks without additional working house equipment and without decreasing the efficiency of operation.

The storage basement is 13 ft. high and the cupola story 17 ft. high. These stories have large window area so both are well lighted and may be thoroughly ventilated.

Grain is carried to storage bins by 10 48-in. belt conveyors, and from storage by seven 42-in. belt conveyors. From the working house the ten receiving belts deliver grain to fixed spouting in the galleries above the tanks, the trippers operating on these belts being able to reach five different bins from one tripper location. (See Figs. 7 and 8.) This combination of trippers and spouting saves much time in the

movement of trippers when placing grain in store.

THE SIGNAL SYSTEM in the cupola was manufactured in Switzerland. It consists of two units of double faced annunciators with figures 3 ins. high placed over each of the ten belt runways in storage house cupola. Four control stations are located on the scale floor of working house. Each of these control stations consists of transmitting apparatus which permits weighman on the scale floor at any one of the four stations to indicate on the annunciators at any one of the ten belts in each house the number of bin for which tripper should be set. Over each transmitter is placed a miniature annunciator containing one unit for each of the ten belts and one set of three signal lights for each belt. As the signals being sent from any transmitting station to any belt are indicated on each of these miniature annunciators each weighman on the scale floor is therefore able at all times to see just which belts and bins are in use.

In the operation of system the weighman first establishes circuit to the belt he wishes to use. This lights a white light at each of the annunciators in the storage house over the proper belt and in each of the miniature annunciators on the scale floor indicating thereby to the tripper operator in the storage house that there is an active signal on the belt in question and to the other weighmen on the scale floor that this belt is in use. He is then able with the use of only three contact buttons to set up the proper bin number on the annunciators using any combination of numbers from 000 to 999. The fact that the same numbers as those appearing over the belts in the storage house also appear on the miniature annunciator at the transmitting location is a definite indication to the weighman that the proper signal has been transmitted.

When the tripper operator on the belt runway has seen the active signal he uses switches which have been provided at three convenient locations along each runway to light first a red light in the annunciator unit on the scale floor which indicates to the weighman that his signal has been seen and understood. He then sets the tripper for the proper bin as indicated and by means of another switch extinguishes the red light and lights a green light which indicates to the weighman that the tripper has been properly set and that grain can proceed.

The signals for the seven basement belts are an extension of the signal system for the shipping legs; that is, the operator in the storage basement while he has no control over the operation of the signals, can always see and be governed by the signals being transmitted, controlled either from the first floor or the scale floor. Similar extensions of the drier leg signals have been placed in the drier. In the storage house basement the signals are placed in specially assigned operating aisles and the ropes for operating bin valves for all of the bins tributary to the adjacent belts have been brought over to this aisle so as to be readily accessible by the operator. See Fig. 16.

Monitors are provided in the roof of cupola over storage bins so that the interior portion of this large area is thoroughly provided with daylight.

The trippers are all Webster Terminal Elevator Trippers equipped with Hyatt Roller Bearings, one of the 25 trippers being a 4-pulley tripper, the balance 2-pulley trippers. Each tripper is equipped with special dust collecting fan made by Webster under patents held by L. A. Stinson.

Grain from 335 bins of the storage annex may be spouted to the seven 42-inch shipping belts beneath and conveyed to the 7 shipping

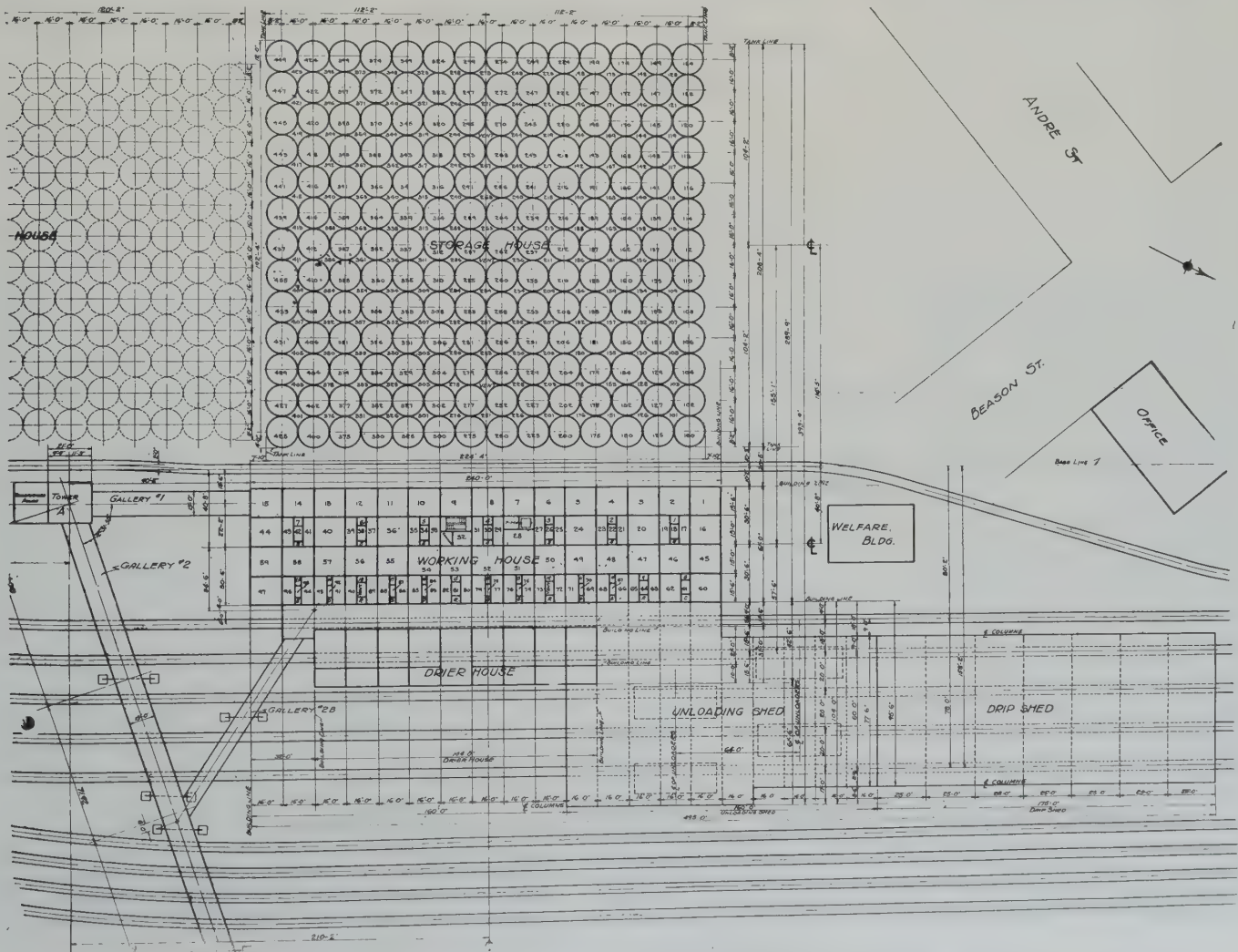


Fig. 6—B. & O. Elevator. Showing Location of Different Units of New Elevator.

legs in working house at the rate of 25,000 bu. per hour.

Morse Silent Chain Drives are used generally in the application of power in this plant. The largest are the four 150-h.p. on conveyor belts driving by a 10 in. wide chain 20 ft. long. Two 100-h.p. drives on two other belts are identical, except that the chain is 7 ins. wide. Six of the 100-h.p. drives on belt conveyors have chains 11 ins. wide and 20 ft. long. Ten 40-h.p. Silent Chain Drives are used on belt conveyors. These are as close as 40 in. centers, with chains 5 ins. wide and 12 ft. long.

The Drier House is of concrete and situated in front of the working house, the grain being spouted direct from the working house scales to the drier bins located over the driers and from the latter direct to the elevating legs in the working house. The drier house is 31 ft. wide, 144 ft. long and 99 ft. high. Each of the 8 drier bins holds 6,000 bus. and each of the 8 driers has a capacity of 500 bus. an hour, the total capacity being equivalent to drying and cooling 100,000 to 150,000 bus. of corn daily.

In the new Hess Driers the air from each drier is discharged into a large chamber where the velocity is so reduced that practically all of the visible dust is removed, by settling on the floor, which is an open grating below which are steep sided hoppers connected to the dust collecting system of the elevator. The exhaust air from the machine is discharged thru the top of the chamber. The steam coils in this drier are placed in a room by themselves and entirely separated from the drying chamber. No exhaust air or dust from the machine can enter this room.

The spacious building housing the Hess Driers allows ample room around the machines. Wide stairways are provided to reach all floors. The walls have large windows, making it practically a glass walled building, providing an abundance of light and air.

THE DRIP SHED, 176 ft. in length, over the tracks leading to the dumpers permits rain to drip off cars under cover before they are placed over the receiving pits for unloading.

The Shipping Facilities. While this elevator is designed primarily for handling export grain shipments two car loading spouts are provided for loading grain into cars on track next to working house. See Fig. 17.

The boat loading facilities of the B. & O. ele-

vator are no doubt the most flexible and the fastest at any American seaport.

The fireproof conveyor gallery system which houses belts with a carrying capacity of 150,000 bus. an hour is made up of unusually large galleries, one large distributing tower "B" and three smaller towers where the directions of the flow of grain is changed. See Figs. 9 to 15 inclusive.

Pier 7 (see Fig. 10) is 50 ft. wide and 1,000 ft. long of new construction. It is designed to expedite the loading of vessels taking full cargoes of grain and while it can load four vessels at one and the same time, its star performance will be in the loading of large cargoes into ocean vessels that are in a hurry to get away. It can discharge three belts into the same vessel at once. All Pier 7 belts are on the same level and the two inside belts can discharge grain to berths on either side of pier. Pier 7 is piped so as to supply fresh water to ships docking for grain and team deliveries can be made to vessels while they are taking on grain. Roofs of galleries slope away from edge of dock.

Pier 6 (see Fig. 12) is a wide pier completely occupied by a merchandise warehouse so that vessels taking mixed cargoes are docked at that pier. Being nearly 1,000 ft. long this pier can easily accommodate four large ocean going vessels, two on each side. Shipping galleries surmount the warehouse and extend the full length of the pier on each side so that grain can be delivered at a rapid rate to the holds of any vessel docked at the merchandise pier.

After the elevator crew has placed a cargo in any of the 15 large shipping bins arranged in a row along the west side of the working house, the movement to vessels is under the direct control of the shipping foreman. Under the shipping bins running longitudinally of the house are six 42-inch rubber conveyor belts arranged one above the other on opposite sides of a passage-way so that the spout man can turn a spout from any of the 15 bins to either of the six belts on the opposite sides of the long passageway. Fifteen levers at the shipping foreman's station give him complete control of the outlet valves of each bin so that he can send six 25,000 bu. streams of grain out to tower B simultaneously. He is in continuous communication by telephones and electric signals with men stationed in the lookouts of the dock galleries and increases or reduces the flow of grain to meet the needs of the trim-

mers in the holds of the vessels.

The large gallery running from tower "A" at the south end of working house out over tracks to tower "B" on the water front is 567 ft. long and houses the six large conveyor belts.

TOWER "B" located at the land end of pier 7 houses novel and complicated distributing machinery. The tower is of fireproof construction, 36 ft. square and 103 ft. 6 in. high. Stairs are provided for access to any of its seven floors.

As is clearly shown in figures 13, 14 and 15 grain from any of the six large belts entering the top story can be easily diverted to any of the conveyor belts running out of the lower stories through the Metcalf roller telescoping distributing spouts of special design. These spouts deliver grain through eight openings in the floor so that grain from any of the six incoming belts can be spouted to any of the four 42 in. belts supplying grain to Pier 7 or to the belts in the galleries along the two sides of Pier 6. Provision in the tower has been made for installing two other belts leading to merchandise piers on the north so that should it be desired at any time in the future to add additional facilities for loading grain into boats taking merchandise at these docks, grain can also be supplied to them from tower "B."

Much of the power for operating this extensive system of conveyor belts comes from large ball bearing motors in tower "B" where are located six motors of 100 h.p., four of 150, and one 40 h.p. motor. Other large motors are also placed in towers "C" and "D."

All of the rubber belting used in loading facilities is 42 in. wide and runs over Webster converging rolls of malleable iron equipped with ball bearings with 3-step lubrications. All head and tail pulleys of conveyors are equipped with Makutchan idler bearings.

All the galleries are commodious, well lighted, and provided with many windows and roof vents so they can be thoroughly ventilated.

In the dock galleries are fourteen 2-pulley trippers which are self-propelling in either direction. These divert the flow of grain from the shipping belts to rainproof Willford dock spouts placed at convenient points and make it possible to load during rainy weather. Wireropes with tackle blocks and heavy drum winches facilitate the handling of these heavy spouts.

Asbestos Siding is used on the side walls of

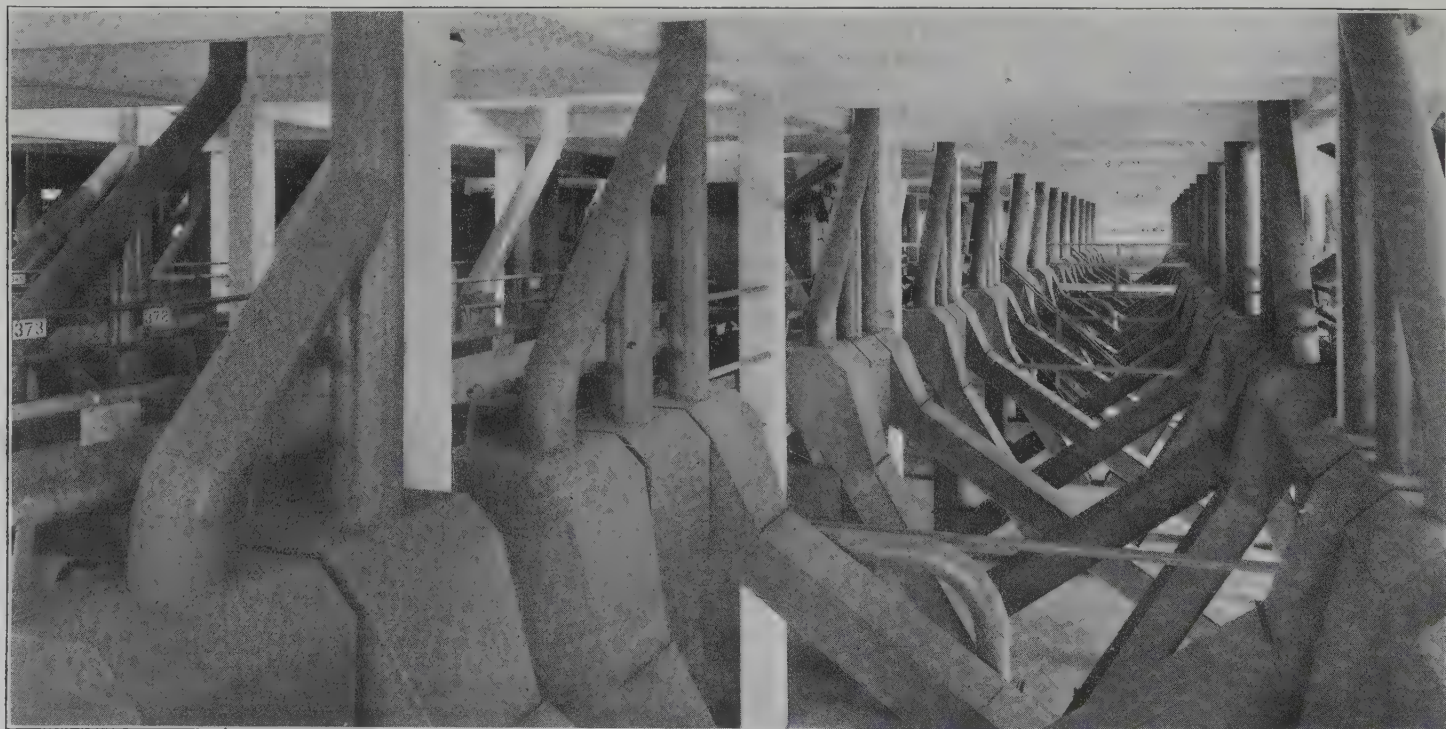


Fig. 7—B. & O. Elevator. Cupola of Storage Annex Showing Fixed Spouts Which Receive Grain from 48" Receiving Belts and Divert to Bins. Note Large Vent Pipes in Top of Spouts. (See illustration on facing page.)

all shipping galleries, on the side walls of drip shed, side walls of towers B, C, D, and on A above the first story. The sheets of Ambler Corrugated Asbestos Siding are 27½ ins. wide, secured by ⅝-in. galvanized clips, the sheets lapped 6 ins. at ends and two corrugations at the sides. The 160,000 sq. ft. of asbestos siding was furnished by the Asbestos Shingle Slate & Sheathing Co.

The tile for partitions and curtain walls is 6 ins. thick. The floor of shipping galleries are of 3-inch book tile. Gypsum poured in place roofs are used on all galleries, sheds and towers "A," "C" and "D."

In the shipping galleries a smooth floor has been obtained without the usual obstruction of tripper rail above the floor by using as a tripper rail two small channels placed back to back with the top at floor level spaced so as to form a groove for a special single flanged tripper wheel.

The Marine Tower at the river end of pier No. 7 for the unloading of grain received from the Chesapeake Bay boats and for the unloading of salvaged grain from larger vessels is equipped with twin pneumatic unloading equipment and automatic scales to unload 4,000 bus. per hour, which is the average cargo of the small bay boat. This grain may be stored in the 3 bins of the tower or conveyed into the elevator by an independent 30 inch belt conveyor running thru the receiving gallery from the marine tower at end of Pier 7 to the elevator. This small gallery is supported under the shipping gallery.

The marine tower is 38x18 ft. and 5 stories high, built of concrete. It has two unloading booms, making it possible to unload two boats simultaneously, each unit being absolutely independent of the other. The suction pipes draw grain from the boats and deliver to two 2,500-bu. Richardson Automatic Scales on the second floor, the suction being created by two exhausters on the dock floor, driven by leather belts from two 100-h.p. Fairbanks-Morse Electric Motors.

From the scales the grain goes to boots of two elevating legs having 6x6x12 Buffalo Buckets running over 48-inch head pulleys,

driven by one 15-h.p. Fairbanks-Morse Motor from a common head shaft, with Morse Silent Chain drive. Automatic control instantly stops the machinery in case of a choke.

The grain elevated by the legs into three bins of 12,000 bu. capacity may be discharged to either boot for re-elevation, or may go direct to the 30-in. belt that lands it in a room over the track shed roof where is a turn head to two spouts. Spout "A" for car loading and "B" to either of two legs in the working house.

Electric Power is supplied from a public service station. The transformer house is 21x69 ft., and has a switch room 21x21 ft. It contains nine G. E. transformers, three being 1,000 k.v.a. single phase, three 400 k.v.a., and three 40 k.v.a. high tension alternating current of 13,200 volts, 3-phase, 25 cycles, is delivered over underground cables to the transformer house. In all 152 motors are used.

The total number of Fairbanks-Morse Ball Bearing Motors in this plant is 145 and the total horsepower is 7,507½. Sizes range from the ¼ h.p. used for the feeders in the Hess Drier to 175 h.p. to drive the receiving and shipping legs. Some of the longer belt conveyors have 150-h.p. motors, 8 of them have 100-h.p. motors, and 11 have 40-h.p. motors. The 16 75-h.p. motors are used to drive the car pullers, car dumpers, the 4 separator legs, 4 dust collector fans, screenings blower and a dust exhauster. In all there are 20 different sizes of motors.

The compensators for the electric motors all are inclosed in cast iron cases with transformer, contacts and operating mechanism immersed in oil, arranged for remote control operation from motor switches connected to give no voltage protection. Each branch motor circuit is protected by circuit breaker where connection is made to main feeder.

In addition to the automatic compensator the motor operating the transfer belt on the spouting floor has a 3-pole double throw switch, hand-operated, for the purpose of reversing the direction of rotation of this motor.

These Fairbanks-Morse Motors are of the 3-phase, 25-cycle, squirrel cage induction type, taking a 550-volt current. Their ball bearings

are sealed against grain dust, and they are capable of carrying a 25% overload for two hours without over 55 degrees Centigrade temperature rise. All have conduit terminal boxes.

Freedom from dust is obtained by a well worked out dust collecting system, including a vacuum sweeping system with 160 intakes so situated that every part of working house, with exception of first floor, can be reached with 25 ft. length of 2-inch hose.

Collected dust is delivered to a branch of the low pressure fan system. The machinery is a standard airveyor vacuum unit direct connected to 30-h.p. Fairbanks-Morse Motor. Intakes are of aluminum and are therefore non-corrosive and non-sparking.

Stair treads and platforms and other walkways generally throughout the plant are constructed of an open type of grating on which it is impossible for dust to collect.

THE DUST-COLLECTING system was divided into nine units covering all loading, transfer and conveyor belts, and fifteen cyclones were required in connection with these units, eight cyclones handling the separators, two handling the clippers and four cyclones on the dust house, handling eight collecting systems and 1 cyclone on the cupola handling bin loading belts. The dust house being located 250 feet distant from the working house, the eight discharge lines were carried over the galleries and across this intervening distance by means of substantial structural supports firmly anchored to concrete footings.

Fifty-five tons of copper bearing galvanized sheets were required for the dust pipes alone, exclusive of metal required for the cyclones which were also constructed of heavy gage copper bearing metal.

The entire job was fabricated from the raw sheets by means of special machinery designed by Robert Gordon, Inc., for this purpose.

The pneumatic screenings carrier system is interesting due to the development of special features in connection with the hopper connections to the discharge lines. These lines were carried underground from the working house to the dust house, where the discharge from these lines was properly disposed of thru the

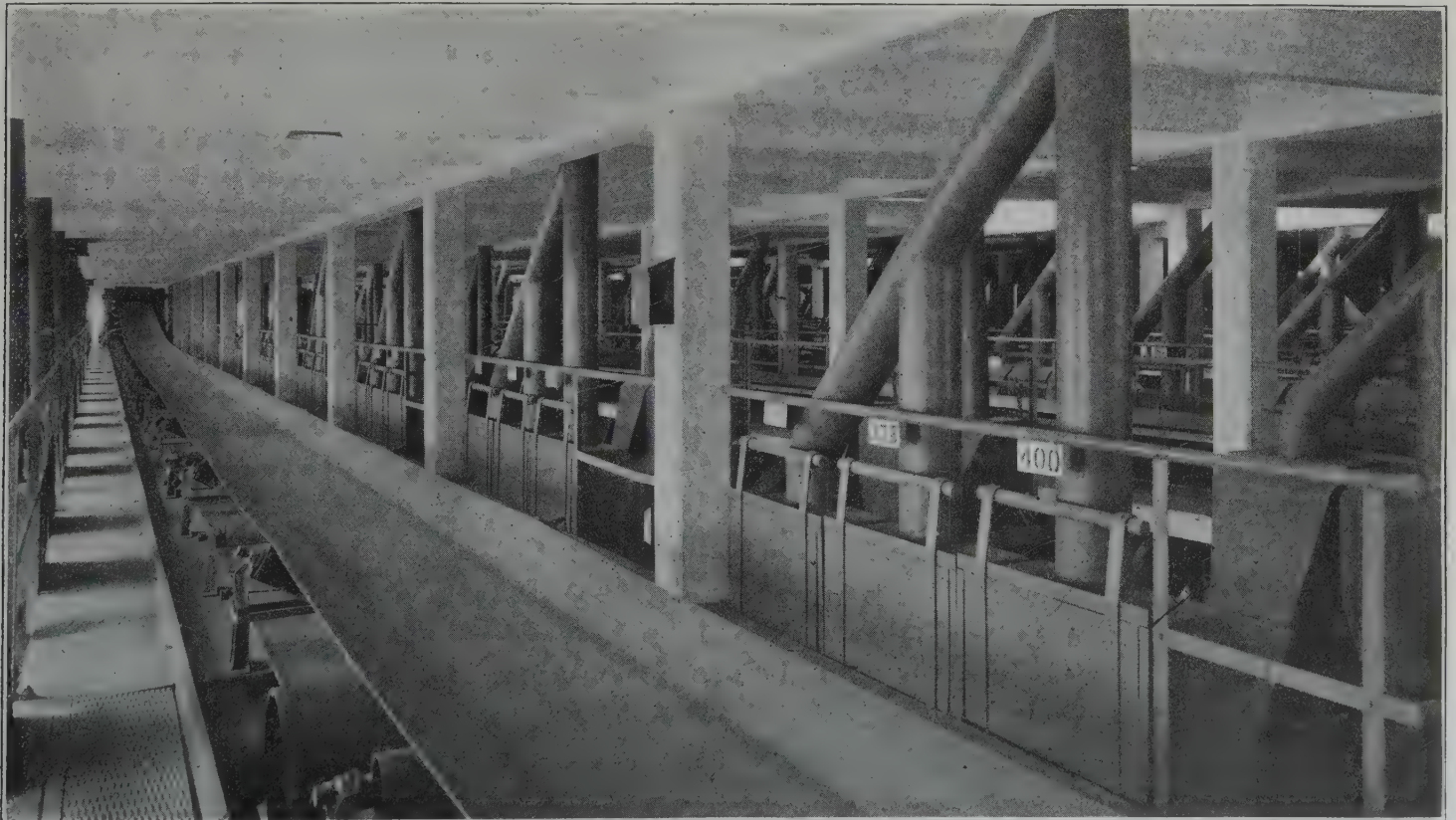


Fig. 8—B. & O. Elevator. Cupola of Storage Annex Showing One of the Ten 48-Inch Belt Conveyors from Which Grain Is Tripped to Fixed Spouting at Sides. Note Large Vent Pipes Extending from Spouts Out Through Roof. (See illustration on facing page.)

intricate mechanism of the feeders, storage bins and car loading equipment. These two items together with compressed air system were under the immediate control of Robert Gordon, Inc.

The dust system units have 9 motors of 15 to 75 h.p. The vacuum sweeper exhaustor has a 30-h.p. motor. The screenings blowers have 50 and 75-h.p. motors, and the dust conveyor a 5-h.p. motor.

The dust collection building is of concrete 28 ft. wide, 56 ft. long and 30 ft. high. It has a bin capacity for two carloads of dust. The house contains a screw conveyor and an agitator in the dust bin for loading cars with bulk dust.

The dust collecting system has intakes at floor sweeps, belts, boots, belt loaders, cleaners, driers. Lodgment of dust on the walls is avoided by painting all interior concrete surfaces 3 coats of white paint having a glossy finish.

The storage house annex has three vents from basement to above main roof. The working house has similar vents, of galvanized steel. The outside bins of storage annex are vented thru the walls near the top, the other bins thru the roof. The interior bins in the working house vent into the bin story, the opening being protected by a steel grating in the concrete floor.

Compressed air is provided for cleaning out motors, the system including numerous pressure tanks, and small piping from $\frac{1}{2}$ inch up to 1 $\frac{1}{2}$ ins. for the mains.

TEMPERATURES of grain in all storage bins is ascertained by a Zeleny Thermometer System, the recording instruments of which are housed in a special room above storage annex built of 4-inch tile. The system was furnished by the Western Fire Appliance Co.

Fire Protection: This elevator is the first one to be built entirely in accordance with the



Fig. 9—B. & O. Elevator. Marine Tower at End of Pier 7 Showing Suction Intakes of Pneumatic Unloading Equipment.

new regulations recently adopted by the National Board of Fire Underwriters. The design of the buildings avoids ledges and rough surfaces where dust might adhere or collect. Vents to the outside air are provided for all the bins, garners and legs, as well as from the basements under the working and storage houses. The design has been to collect static dust and also to minimize the spread of suspended dust which is responsible for dust explosions. This special attention to preventing fire or dust explosions has given the elevator the lowest rate of insurance. Hose reels, hydrants and standpipes provide water for fighting fire, while fire

extinguishers have been placed at all points of hazard. Numerous stations connect with a complete fire alarm system.

A Dow Spiral Slide Fire Escape has been installed at the south end of the working house, with openings at each floor.

Salt water is used for fire service, there being 8 hydrants, with standpipes and 100 feet of hose at each floor.

No drop cords or flexible cords for lights were permitted to be installed.

All windows have metal sash, of standard rolled steel section, with 14x20 lights. The



Fig. 10—B. & O. Elevator. Pier 7 Is Equipped with Four 42-Inch Shipping Belts and Many Rainproof Loading Spouts. Gallery Is Covered with Corrugated Asbestos Siding.

ventilating sash are pivoted. The basement windows are guarded by heavy 1x1 inch mesh No. 11 wire netting galvanized.

THE FIRE DOORS are mostly of the single swinging type. They are fitted into channel frames and close against iron stops in such a manner that when closed the door surface is flush with the wall. Instead of the usual weight and cable device for closing, the doors are equipped with Corbin door checks of the underwriters' labelled type, wherever closing devices are necessary. The chief reason for this method of closing is the fact that such a device is not so easily tampered with by the workmen, and positive closure is assured at all times. The plant contains approximately 175 air-core fire doors.

In locations where extreme dust tightness is desired, as for example, in the switch rooms, doors are made to close against felt gaskets secured to the door stops. Such doors bear underwriters' labels for fire walls, and are equipped with triple latches.

A few double leaf swinging doors are used at exterior openings, and these, as a rule, have one leaf equipped with head and foot bolts operated by means of handle from the inside only. The other leaf, in some cases, has handle on inside only, thus obviating the necessity of using locks on these doors, since any one on the inside of building would be able to get out, but no one could gain entrance. Automatic controls were introduced on double doors, in order that the proper leaf might swing home first, thus avoiding the danger of having doors fail to lock properly.

At openings in walls through which belt conveyors pass, doors of the vertical sliding type are installed. These doors are normally open and are provided with cables and fusible links so that in case of fire, doors will fall onto the belt, thus closing opening in wall. In order not to damage the belts, doors are equipped with rollers on the bottom, and other rollers are provided directly underneath the belt. Thus when door is dropped, the belt is running between rollers.

The grain door reclaiming plant, shown in Fig. 19 is a novel feature. It is housed in a building of brick one story high, 30 by 36 feet, having a covered concrete platform and served by a monorail conveyor from the car dumpers.

In construction of office building adequate quarters were provided for the Inspection Department and Weighing Department of the Chamber of Commerce, including provision for a fully equipped testing laboratory by means of which samples are promptly tested and grades established thereby eliminating delay in unloading cars which invariably occurs when



Fig. 11—B. & O. Elevator. Interior Conveyor Gallery No. 2 Showing Belts Leading to Tower "B."

dependent upon an uptown laboratory for the establishing of grades.

Between it and the working house is the welfare building. The power house is separated from the elevator by the intervening railroad tracks and from the river dock by a 45-ft. driveway.

COMMUNICATION is effected by telautograph, 41 automatic telephones, electric bells, lights, speaking tubes, ticket elevator and a pneumatic ticket carrier system operates from superintendent's office to foreman's office, from foreman's office to weighman's office, and from the unloading shed to chief weighman's office on the scale floor.

ILLUMINATION: The premises are well lighted by electric lamps. All conduit is concealed in concrete. The wire conduits are of iron, hot galvanized. All phone wires are lead covered.

PLANS AND SPECIFICATIONS for the elevator were prepared by the John S. Metcalf Co. L. A. Stinson acted as consulting engineer for the railroad. The general contract was awarded to M. A. Long & Co. The work was carried out under the general direction of H. A. Lane, chief engineer, and L. P. Kimball, engineer of buildings, for the Baltimore & Ohio railroad company, assisted by C. E. Wood, who is now superintendent of the elevator.

THE MACHINERY for elevating and conveying was made and supplied by the Webster Mfg. Co. and included the elevator legs, the extensive grain conveying equipment, the telescoping, Mayo and Willford Dock Spouts, the power shovels, car pullers, and all power transmission machinery except the chain drives and herringbone gears.

The Dow Company furnished the enclosed



Fig. 12—B. & O. Elevator. Shipping Galleries Over Piers 6 and 7. Tower "B" in Foreground.

spiral slide fire escape on the south end of the working house. It is the first installation at a grain elevator of this most efficient fire escape. Persons fleeing the flames jump into the steel tower and slide gently to the ground.

The grain separators and oats clippers were furnished by the S. Howes Co.

Nine and one-half miles of rubber belting was supplied by the Diamond Rubber Co. for conveyors and legs.

Fairbanks, Morse & Co. furnished the hopper scales, and practically all of the electric motors.

The Richardson Scale Co. furnished automatic scales.

The Morse Chain Co. supplied the silent chain drives.

The Fawcus Machine Co. built the herringbone gears.

The Hyatt Roller Bearing's were used in the trippers and boots with the herringbone gear drives.

The Hess Warming & Ventilating Co. built the driers and supplied Hess Interlocking Steel Gratings for stair treads, landings and elevated floors.

The Asbestos Shingle, Slate & Sheathing Co. supplied the corrugated sheathing on the sides of all galleries and towers.

Makutchan Roller Bearings were supplied by Wm. E. Pratt Mfg. Co.

Adulterations and Misbranding.

Arcady Farms Milling Co., Chicago, Ill., consigned 2 shipments of feed from Illinois into Maryland, which were labeled to contain 20% protein. The U. S. attorney for the Northern District of Illinois filed an information against the corporation. Samples taken from the two consignments showed them to contain 17.31% and 18.34% of protein, respectively. A plea of guilty was entered on behalf of the defendant on June 19, 1924, and the court imposed a fine of \$100.

Dallas Oil & Refining Co., Dallas, Tex., sent 2 consignments of cottonseed cake and meal from Texas into New Mexico. An information against the concern alleging misbranding was filed by the U. S. attorney for the Northern District of Texas. This resulted in samples being analyzed. The products were guaranteed to contain not less than 43% protein. Actually they contained only 41.74%. A plea of guilty was entered on behalf of the defendant and a fine of \$200 imposed.

Terrell Oil & Refining Co., Terrell, Tex., suffered a fine of \$150 for shipping a quantity of cottonseed meal from Texas into Kansas, upon the U. S. attorney for the Northern District of Texas filing an information against it alleging misbranding. The product was guaranteed to contain not less than 43% protein, whereas analysis showed it to contain only 40.73% protein. The weight was guaranteed 100 pounds net, but examination showed 20 sacks of the article to average only 98.56 pounds each.

The Buckeye Cotton Oil Co., Augusta, Ga., shipped a quantity of cottonseed meal into Connecticut and South Carolina which was labeled to contain 36% protein. The U. S. attorney for the southern district of Georgia filed an information alleging adulteration and misbranding. Analysis showed the articles to contain less protein and more fiber than the labels called for. A plea of guilty to the information was entered on behalf of the defendant on Apr. 25, 1924, and a fine of \$50 imposed.

S. Zorn & Co. shipped from Louisville, Ky., on May 8, 1924, to Columbia, S. C., 200 sacks of mixed oats for which the U. S. attorney for the Eastern District of South Carolina filed a libel praying seizure and condemnation, alleging the product was adulterated and misbranded. It was labeled in part "Mixed Oats * * * Other Grains Crescent Zorn Bleached Grain," the words "Other Grains" being apparently inconspicuous, while "Mixed Oats" took a very prominent position. Judgment of condemnation and forfeiture was entered. The product was released to S. Zorn & Co. upon payment of the costs and execution of a \$1,000 bond, on condition that it be relabeled "Bleached Crescent Grain Screenings."

Mississippi Elevator Co., Memphis, Tenn., had to pay costs, execute a bond for \$500, and agree to correctly relabel 100 sacks of oats which

were seized at Okolona, Miss., when the U. S. attorney for the Northern District of Mississippi filed a libel praying seizure and condemnation of the goods, alleging misbranding. Contrary to the single label of "Oats" the product consisted of an admixture of oats containing moisture, wild oats, barley screenings, rye, corn, chaff, dirt and foreign material. The article had been shipped from Tennessee into Mississippi.

Pan American Feed Milling Co., West Toledo, O., shipped various consignments of tankage from Ohio into Missouri. Two shipments were guaranteed to contain not less than 18% protein, not more than 7% fiber and approximately 14% bone phosphate; and protein 21%, fiber 4.1%, bone phosphate 13% respectively. An information filed against the concern resulted in samples being taken for analysis by the Bureau of Chemistry, which found that less protein and bone phosphate and more fiber than the labels called for, were contained in the goods. The court imposed a fine of \$75.

S. Zorn & Co., Louisville, Ky., shipped 160 sacks of bleached grain to Carrollton, Ga., for which the U. S. attorney for the Northern District of Georgia filed a libel praying seizure and condemnation, on May 17, 1924. Tags attached to the sacks stated "150 Pounds Bleached Crescent Grain Made by S. Zorn & Co., Louisville, Ky. * * * Ingredients: Oats, Barley and Other Grains." It was alleged that the product was actually bleached screenings, for which reason judgment of condemnation and forfeiture was entered. The product was released to S. Zorn & Co. upon payment of costs, execution of a \$300 bond and condition that the article be relabeled "Bleached Crescent Grain Screenings."

John Wade & Sons, Memphis, Tenn., consigned 75 sacks of mixed oats to Malvern, Ark., where they were seized, upon the filing of a libel by the U. S. attorney for the Eastern District of Arkansas on or about May 9, 1924. The article was labeled in part "Wade's Star Mixed Oats Other * * * Grains * * * John Wade & Sons, Inc., Memphis, Tenn." the words

"Star Mixed Oats" being in heavy, large, black type and "Other Grains" in smaller light type inconspicuously placed. Adulteration and misbranding was alleged and judgment of condemnation entered. Eli Clevenger Co., Malvern, Ark., claimed the property and had to pay costs, execute a \$100 bond and relabel the product "Wade's Star Screenings."

The Baltimore & Ohio Railroad.

America's first railroad, chartered and constructed for conducting a general transportation business, was the Baltimore & Ohio. The first spadeful of earth in its construction was turned July 4, 1828. On the original line of 14 miles to Ellicott City the motive power was horses, and even dogs. A "sail car" was tried out and thought a wonder at that time. But by 1830 Peter Cooper had succeeded in perfecting his locomotive engine for a trial.

Its objective point, the Ohio River, was reached by the construction gangs at Wheeling, W. Va., on June 22, 1852. In 1871 the company extended a rail line to Pittsburgh, and by 1874 to Chicago. The system has grown until today it serves the population of 11 states and reaches 167 cities, with a total mileage of 5,207. Since 1900 the company acquired by purchase 1,700 miles of road, and on the property and in the acquisition of securities has since expended \$533,000,000.

As a result of the improved facilities the company in 1923 not only handled the largest business in its history but did so with such ease and dispatch as to indicate its ability to handle a very much larger volume of traffic. It is built for a considerable period beyond its present day requirements. The construction of the new grain elevator at Baltimore is in line with the policy of the management to build for the future.

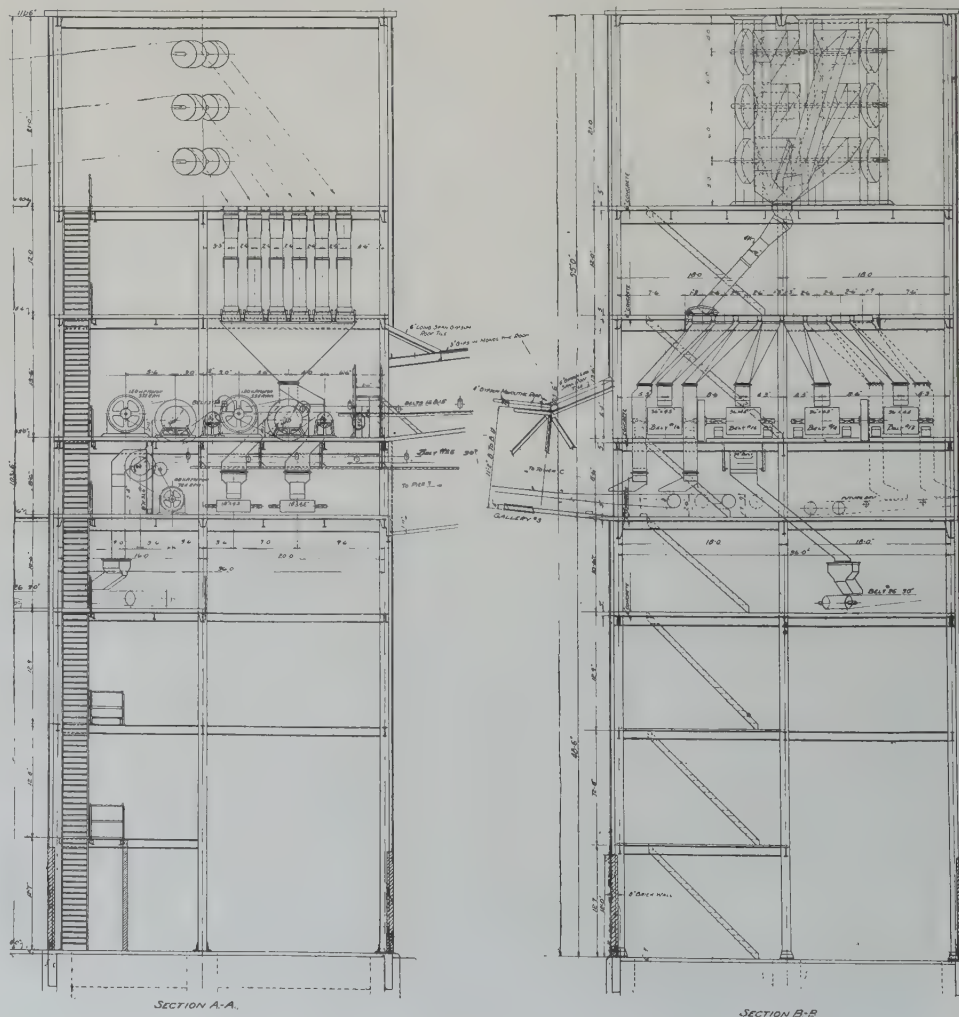


Fig. 13—B. & O. Elevator. Sectional Elevations of Tower "B" of Conveyor Gallery System.



Fig. 14—B. & O. Elevator. Seventh Floor Tower "B." These Distributing Spouts Receive Grain from Six 42-Inch Belts Entering Top Story and Divert it to any of the Belts Running Over Pier 6 or Pier 7.

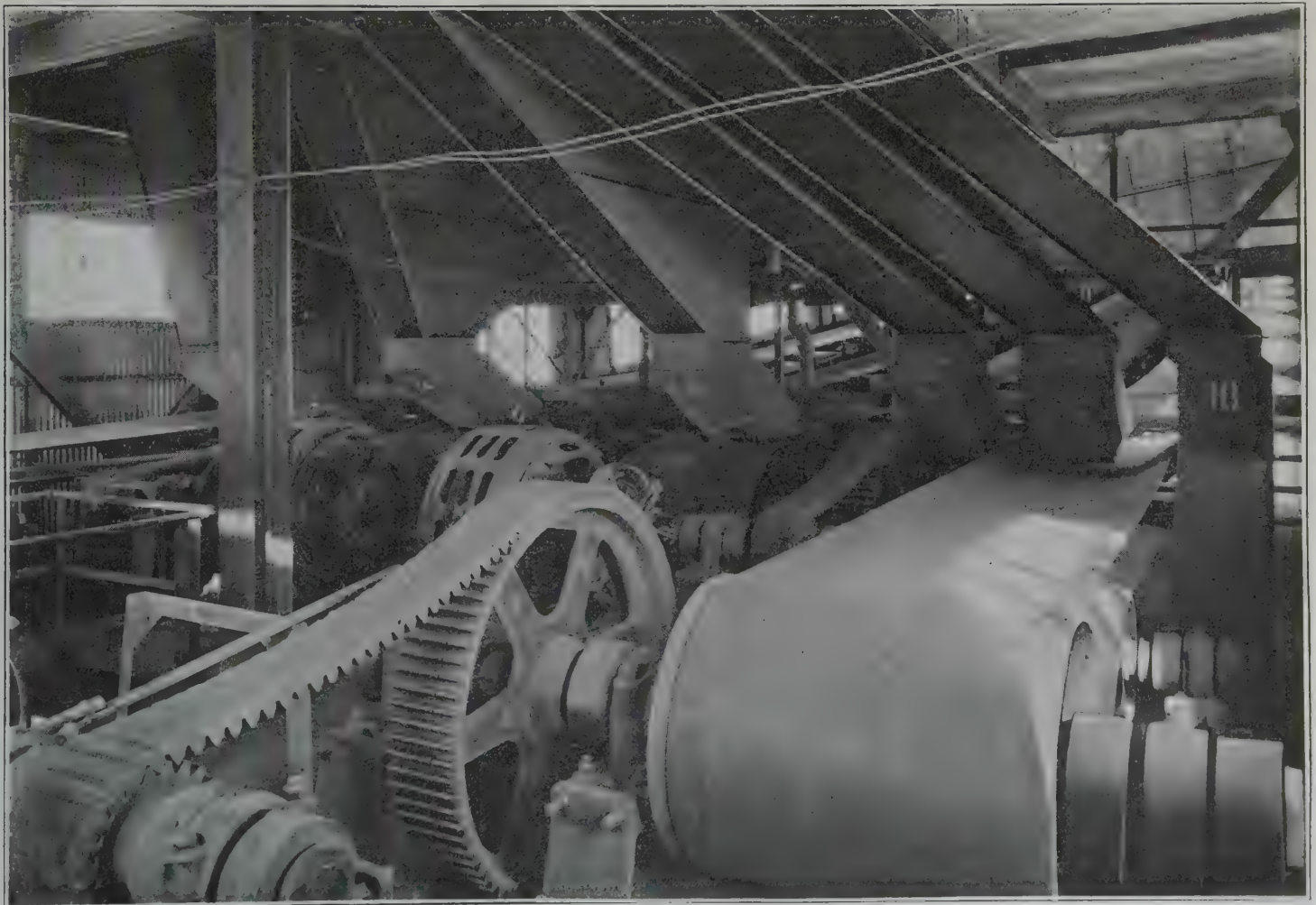


Fig. 15—B. & O. Elevator. Sixth Floor Tower "B" Spouts Leading to Six Belts Which Carry Grain to Pier 7 and to Pier 6.

Feedstuffs

Hastings, Neb.—B. F. Plum and Perry C. Schaefer recently purchased the Hastings Flour & Feed Co.

Mount Ida, Ark.—Henry Coffman has purchased the entire interests of Irons Bros. in their wholesale feed business here.

Memphis, Tenn.—R. N. Neal & Co., cottonseed products handlers, have opened a new office in the Exchange Building.

Knoxville, Tenn.—Security Mill & Feed Co. has changed its name to Security Mills. The concern is capitalized at \$175,000.

Appleton, Wis.—The plant of the Appleton Cereal Mills has been leased by Edward Kuck, who will continue the grain and feed business.

Norfolk, Neb.—Norfolk Cereal & Flour Mills Co. was recently incorporated with \$100,000 capital stock. C. A. Bridge is manager.

Oakdale, Cal.—A stenciled word, "Vitamore," comprises trade mark No. 204,465, poultry and stock foods, filed by B. H. Matteson.

Roselle, Ill.—Roselle Feed & Coal Co. was recently incorporated by H. W. Schmolit, Wm. A. Fenz and R. H. Fenz with \$25,000 capital.

Tulsa, Okla.—Sherman Durrett, R. A. Hayden and others recently incorporated the Tulsa Feed Co. with \$70,000 capital stock.—P. J. P.

London, Eng.—A stencil, "Maxco," is filed under trade mark No. 203,013, food for poultry, game and birds, by Spratt's Patent (America), Ltd.

Kansas City, Mo.—Recently added machinery has increased the capacity of the Feeders Supply Co. to 100 to 200 tons for a run of 10 hours.

Anderson, S. C.—The meal grinding department of the Anderson Cotton Oil Co. suffered a fire recently which caused \$10,000 damages.—P. J. P.

Elkton, Md.—James L. Allender has retired from G. A. Allender & Bro., millers and feed dealers. Garrett A. Allender is continuing the business.

Peoria, Ill.—The Grange League Federation has leased a feed mill of the American Milling Co., which before prohibition was known as Clarke Bros. distillery.

Madison, Wis.—Rapid development of the Hausmann-Meuer Co., dealing in feed and fuel, has caused its members to plan for enlarging its mill and increasing its capacity by 50%.

Exports of Feedstuffs.

Exports of feedstuffs during November, compared with November, 1923, and for the 11 months ending with November, are reported by the Bureau of Foreign and Domestic Commerce as follows:

	November—		11 mos. ending Nov.	
	1924	1923	1924	1923
Bran and middlings, tons...	535	264	2,055	2,105
Cocoanut cake, lbs.	122,800	.....	1,644,454	1,577,940
Corn cake, lbs. ....	.....	.....	.....	15,746
Cottonseed meal, lbs.	65,033,604	7,704,765	132,373,793	41,133,665
Linseed meal, lbs.	6,946,798	1,035,047	19,817,489	31,069,112
Corn feeds, tons	50	252	1,746	869
Other mill feeds, tons	3,460	413	12,277	9,830
Sorghum, kafir and milo maize, bus.	4,476	3,855	61,326	42,929
Prepared feeds, not medicinal, lbs.	3,314,305	930,548	20,054,429	16,469,700
Screenings, lbs.	1,531,267	1,552,522	13,014,208	8,665,412

Kansas City, Mo.—R. D. Nathan was elected pres. of the Kansas City Feed Dealers Credit Bureau at the concluding 1924 meeting of that organization, succeeding Ray Blacker.

Chicago, Ill.—Tennessee Poultry Feed Co. has been incorporated with \$5,000 capital, by Harold A. Smith, R. S. Tuthill, and Frank P. Page, to deal in grain and feeds of all kinds.

Milwaukee, Wis.—W. A. Zahn, sec'y of Chas. A. Krause Milling Co., has resigned and severed all connections with that concern. His plans for the future have not been announced.

St. Louis, Mo.—Affocorn Milling Co. recently filed trade mark No. 202,194 to use in connection with feeds for horses, cattle and poultry. A black band contains regularly imposed "\$" marks.

Springfield, Mo.—The Springfield Flour & Feed Co. is rapidly remodeling the Paragon Mill property, which it purchased at a receiver's sale a few months ago, and will use it for manufacturing feed.

North Kansas City, Mo.—Preliminary runs in the new plant of the Ralston-Purina Co. will be effected this month, practically all machinery being already installed. The alfalfa grinding plant has been in operation for some time.

Everett, Wash.—The Washington Co-operative Egg & Poultry Ass'n is constructing an elevator and feed mill with capacity for 16 carloads of grain. Cost will be approximately \$5,000. New machinery will be installed thruout.

A series of 6 lectures in feeding schools for retail feed dealers, is being conducted at various points in Connecticut under the auspices of the Connecticut Agricultural College. Experts in the feed business deliver the lectures.

Minneapolis, Minn.—"Se-Re-Co" egg mash is covered by trade mark No. 201,744, filed by Frank B. Dennie, for the Security Remedy Co. It consists of the words "Se-Re-Co," "Quality" and "Egg Mash," and a picture of a shield and a baby chick.

Weedsport, N. Y.—Willard G. Adams, 61, member of the firm of Adams & Blumer, wholesale shippers of hay and produce, and interested in C. C. Adams & Sons, handlers of coal, feed and produce, recently died. He was well known in the hay and feed trade.

Bullville, N. Y.—A leader in Eastern feed trade circles, Frank C. Jones, died Jan. 5. For years he served as sec'y of the Eastern Federation of Feed Merchants. L. F. Brown, sec'y of the American Feed Manufacturers Ass'n, and various business associates of Mr. Jones attended the funeral.

Feed Movement in December.

Receipts and shipments of feedstuffs at the various markets during December, compared with December, 1923, were as follows:

	Receipts—		Shipments—	
	1924	1923	1924	1923
Baltimore, tons.....	1,256	1,668	.....	.....
Chicago, tons.....	12,615	13,102	36,693	42,835
Kansas City, tons.....	7,240	3,440	23,260	18,850
Milwaukee, tons.....	1,440	4,845	9,031	24,796
New York, tons.....	600	.....	957	.....
Peoria, tons.....	45,540	43,660	41,847	44,275
St. Louis, sacks.....	179,640	105,410	862,200	742,240

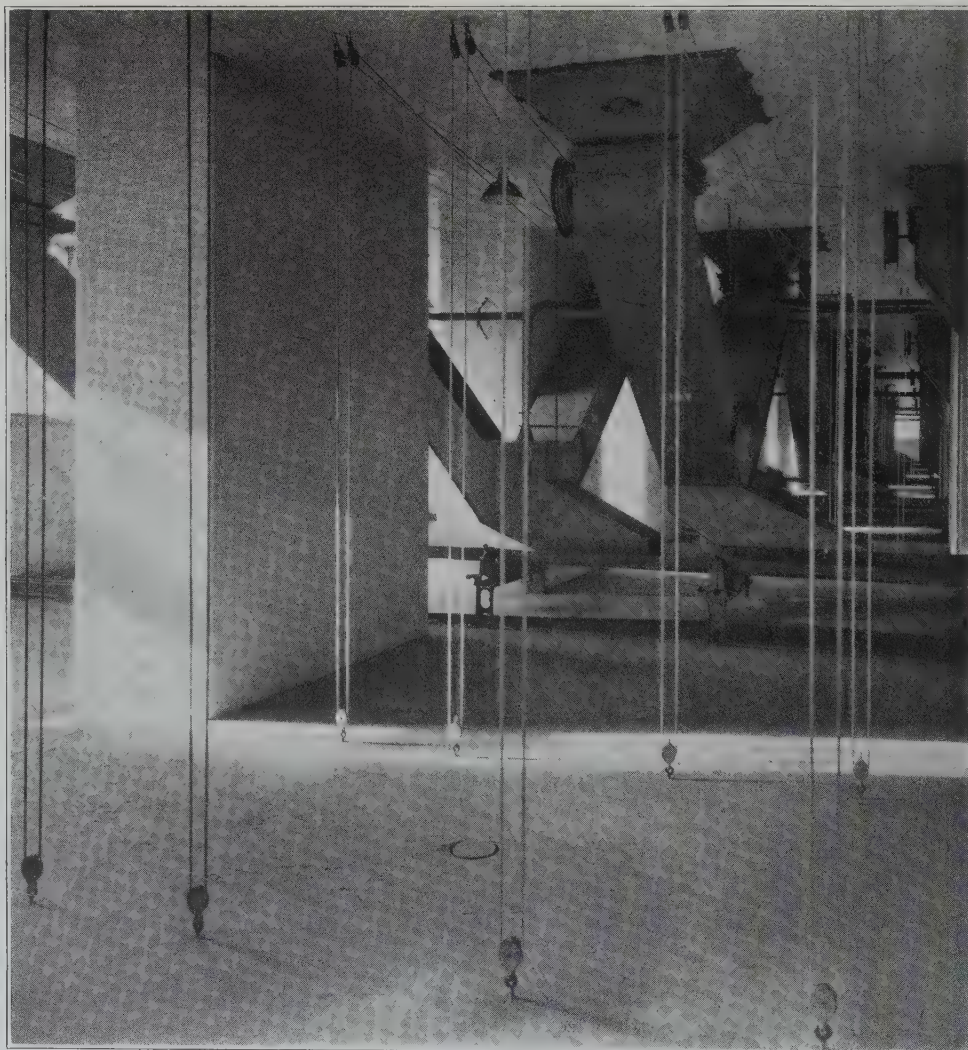


Fig. 16—B. & O. Elevator. Basement of Storage Annex. Showing Drawoff Spouts and Bin Valve Ropes.

Marianna, Ark.—Fire did \$100,000 worth of damage to the Marianna Cotton Oil Mill last month, destroying all of the meal in the plant and several cars on the spur track. The main brick building was wrecked. Controlling interest is owned by Lesser-Goldman Co.

Madison, Wis.—W. B. Griem, for some years assistant to Dr. W. H. Strowd, has been selected to fill the position of chief of the fertilizer and feed division of the Wisconsin Department of Agriculture, following the resignation of Dr. Strowd to accept the secretaryship of the Soft Wheat Millers Ass'n.

Milwaukee, Wis.—William Degentesh, 40, vice-pres. of Degentesh Bros. Co., coal and feed dealers, was found dead in his garage Jan. 2. Emergency hospital physicians said death resulted from natural causes. He was born in Milwaukee in 1884. His widow, five children, his mother, three brothers and two sisters survive him.

Amarillo, Tex.—The Amarillo Feed & Seed Co. is remodeling the buildings formerly occupied by the Panhandle Grain Co. and installing a new \$20,000 mill for grinding and mixing stock feed especially adapted to horses and mules. This enterprise is headed by C. D. Cozart, who says the mill will be ready for operation within a few weeks.

Charlotte, Mich.—L. H. Shepherd Grain, Seed & Milling Co. has donated 200 pounds of feed for the pheasants and quail in this section, reports Chris Millenbacher, district game warden. Farmers are falling in line with the request that they report the presence of the quail or feed them at the state's expense and the birds have not suffered from hunger during the cold days.

Kerrville, Tex.—Gober Gibson has purchased one of the frame buildings and part of the machinery of the Kerrville Milling Co. The building was formerly used as grain bins by the milling concern of which

Mr. Gibson was local manager. This he is remodeling into a feed plant operated with electric power. Present plans call for the manufacturing of dairy and poultry feed.

Buffalo, N. Y.—Hecker-Jones-Jewell Milling Co. has purchased the property of the H-O Cereal Co. both in this city and in Ayr, Canada, owned by the Canadian H-O Co. The consolidation effects one of the largest concerns in the cereal and feed manufacturing business. New directors are Geo. K. Morrow, A. P. Walker, Alfred Jaretzki, F. L. Rodewald, Henry P. Werner, all of New York, except Mr. Werner, who has been pres. of the H-O concern for several years.

Memphis, Tenn.—A merger of the Royal Feed & Milling Co., the Edgar-Morgan Co., Pease & Dwyer and the Superior Feed Milling Co. is under consideration by officials of these concerns and is expected to be completed early in February, a reorganization of the 4 concerns into a corporation with between \$4,000,000 and \$5,000,000 capital being contemplated. John B. Edgar, head of the Edgar-Morgan Co., is understood to be slated for chairmanship of the board of directors of the new organization. —P. J. P.

Chicago, Ill.—O. E. M. Keller, pres.; J. U. Crosby, general sales manager and vice-pres.; and S. A. Peterson, eastern sales manager of the Arcady Farms Milling Co. have resigned and opened an office of their own. It is understood they will continue in the feed business. Mr. Keller served for 2 terms as pres. of the American Feed Manufacturers Ass'n. Mr. Crosby and S. A. Peterson are also recognized feed authorities. Following these resignations the directors of the Arcady Farms Milling Co. selected Arthur Meeker as chairman of the board and W. B. Pearson, as pres.

Federal licensed warehouses, as of Oct. 1, 1924, had a storage capacity of 36,432,795 bush.

Officers Rhode Island Dealers.

The annual fall meeting of the Rhode Island Grain Dealers Ass'n was held at the Crown Hotel, Providence, R. I. Feed credits were discussed and a program outlined for 1925. Solution of this problem is admittedly difficult, but lively discussions will take place and a conclusion of mutual benefit to Rhode Island dealers will surely result.

Several good speakers made the fall meeting a decided success.

Elections resulted in the selection of Pres., Frank E. Potter, Riverpoint; treas., Robert L. Kelly, Providence; sec'y, Harold A. Campbell, Phoenix.

A Dangerous Operation Successful.

A difficult and dangerous operation was recently successfully performed on "Oklahoma's most valuable cow" by veterinarians. The cow is Rosa Segis Johanna, a \$3,000 Holstein. She had picked up a common eight-penny nail and swallowed it with her feed. Soon afterwards the effects were evident. Rosa became violently ill.

Veterinarians had no trouble in diagnosing the case, even locating the exact position of the nail. Rosa was given extra good care, but a few days later it was decided an operation would be necessary. The nail had pierced her forward stomach and was prodding against her heart. She had fainted 5 times.

At the Oklahoma A. & M. College, Stillwater, the valuable animal was placed in a sling and a local anesthetic administered. A long incision cut well back on her left flank enabled one of the veterinarians to reach thru the opening between the two stomachs, thru the second stomach, to the heart. He readily found the nail and drew it out, then explored the stomach and found a second, tho smaller nail.

Spirits of ammonia and strychnine kept up the heart action of the animal during the operation. An hour later Rosa responded by producing 13 pounds of milk.

Great numbers of animals die annually as a result of sharp, pointed objects which are picked up by the animal or occur in the feed, and pierce the walls of the stomach. Nails, pins, keys, bits of iron, staples, a countless number of various forms of metals find their way into the raw products from which feed is manufactured. The only way it can be safely and surely removed is thru the use of powerful magnetic separators which draw these metals out of the raw products before they are fed into the grinders. The only way the dealer can safeguard the animals of the feeders is by selling only that feed which has been properly protected in the process of manufacture by magnetic separators.

Feed Manufacturers Call Special Meeting.

A special meeting of the American Feed Manufacturers Ass'n has been called to meet in Chicago at 1 p. m., Jan. 28, to act upon a proposed change in the first paragraph of Article VI of the organization's constitution. This would be changed to read as follows:

The annual meeting of this ass'n shall be held during the months of May or June at a time and place designated by the executive com'te.

In this paragraph the words "May or" are added to the original so as to permit the executive com'te more latitude in fixing dates for the annual meetings. Thus it would be able to consider climatic conditions and select a suitable date for the 1925 annual meeting which will be held in New Orleans some time during May, if the change is effected.

Under the present wording of the paragraph it would be illegal to hold the meeting at what is now considered the best time. General business conditions will also be discussed at this special meeting.



Fig. 17—B. & O. Elevator. Shovel Receiving and Car Loading Track. Note Window Area of First Story.

Baltimore as a Seaport.

The greatest inlet of the ocean on the Atlantic Seaboard of the United States, Chesapeake Bay, penetrates the land for over 150 miles northward and affords ample space for transshipment of cargo from railroad to steamship lines.

Baltimore harbor comprises 127 miles of deep water frontage, 45 miles of which are developed. On the 373 miles of track within these terminals can be stored 24,111 freight cars.

The pier accommodations of Baltimore are extensive. The Baltimore & Ohio has nine covered piers of an area of 836,900 sq. ft., and three open piers of 124,892 sq. ft., at which 26 vessels can be loaded simultaneously.

The Pennsylvania R. R. has four covered piers with an area of 350,234 sq. ft., and four open piers (including one ore pier) of 145,216 sq. ft., at which 19 vessels may be loaded at one time.

The Western Maryland has one covered pier of 101,992 sq. ft., and one open pier of 51,460 sq. ft., at which eight vessels may be loaded at once.

The Canton Railroad's property at present includes one ore pier of 77,000 sq. ft., one covered pier of 120,000 sq. ft., and one open pier of 599,536 sq. ft.

The port of Baltimore is now served by 62 regular steamship services operated by 39 lines, which dispatch steamers to more than 100 foreign ports. In addition to these overseas liner vessels the port is served by 17 coastwise lines regularly trading between Baltimore and the principal ports of our Atlantic and Pacific seaboards. Sixteen shipbuilding and repair plants welcome the sea-tossed mariner.

The Maryland Legislature during its 1920 session passed an enabling act whereby the city of Baltimore is empowered to expend \$52,500,000 for the development of the port. At the election in November, 1920, the first \$12,500,000 installment of this amount was almost unanimously ratified by the citizens. With the money now available, additional piers, warehouses and other equipment essential to a port with such possibilities for expansion are assured.

The first federal census of agriculture taken separately from the 10-year census of population will be conducted this winter. The last agricultural census was taken Jan. 1, 1920, covering the year of 1919. Farming had then reached the highest point of prosperity in many years.

Peoria, Ill.—Adoption of the 18th amendment closed the distilleries and hurt the grain business of this city. But it is coming back. The distilleries have become



Fig. 18—B. & O. Elevator. Boot of Receiving Leg in Basement of Working House.

stock food factories and oil producers. Recent computations show 900 men to be engaged in the grain business and earning an aggregate of \$1,000,000 per year. This year Peoria consumed 12,000,000 bus. of grain compared with 8,000,000 last year.



Fig. 19—B. & O. Elevator. Grain Door Reclamation House and Monorail Conveyor for Grain Doors.

Report of Factory Inspector on Montreal Explosion.

F. J. Hoxie, engineer and special inspector of the Factory Mutual Fire Insurance Companies, made a close examination of the two connected elevators of the Harbour Commissioners at Montreal, Que., immediately after the explosion of Dec. 1.

Mr. Hoxie collected samples of dust from various parts of this and other elevators of the Commission, as stated in Mr. Hoxie's report to the inspection department at Boston, Mass., and whose report is quoted in the following:

These samples of dust were collected from concrete walls, metal plates, and near conveyors. One was collected from the inside of a large pulley where the grease contained in the grain, possibly assisted by a very small amount of oil which was volatilized from the bearings, had coagulated the fine dust and the centrifugal force of the rapidly revolving pulley had compacted it firmly on the inner surface of the wheel. This dust is of very uniform size, slightly finer than cornstarch, and contains practically no coarse particles, doubtless due to the action of the wind from the pulleys and the grease. This when washed with benzene and dried gives an explosion pressure with pure oxygen of 10 lbs. per sq. inch as compared with 6½ lbs. for cornstarch and 14 lbs. for very fine hard rubber under similar conditions. The microscope shows the sizes of the particles to be in about inverse proportions of these pressures.

Dust was also collected from the end of a conveyor, where, I was informed, 120 bushels a day are deposited. There is good ventilation in this neighborhood, assisted doubtless by the wind from the rapidly moving conveyor and pulleys. This dust does not contain enough fine to be measured, indicating that it is not subject to rapid explosion, and that the ventilation has carried the dangerously fine particles away into the outer atmosphere.

The explosion originated or passed up thru one of the elevator legs in the old elevator and instantly spread thruout the weighing rooms at the top of the old elevator across the bridge and thruout the new elevator. There was no appearance of any fire damage whatever on any of the massive structural steel members of the old elevator. This steel work supports the garsners and weighing tanks by means of which grain in carload lots can be emptied into tank where it is weighed and then transferred to the conveying system, thence to the storage tanks.

The vertical conveyors or elevator legs, are commonly mentioned in a report of an elevator explosion either as the place of origin or center of propagation of the explosion. The discovery of the considerable accumulation of fine dust in the large pulleys suggests that the steel casings which enclose these legs may have a similar deposit. One of the steel casings was badly bulged, indicating a high pressure. The question arises as to why such leg casings are necessary. They serve as immense vertical cannons for shooting the flame into the most dusty parts of the elevators. Why would it not be safer and better to run these bucket belts open so that they can be seen and the dust can be seen and picked up by a suitable suction if required. The dust from the conveyors would be no worse than other elevator dust, then the fine could not accumulate and the hazard of a vertical flue would be reduced.

After the explosion there were numerous smoldering fires in the accumulated dust thruout, but these were very sluggish and did not produce heat enough to damage anything. A few of the large rubber conveyor belts were somewhat burned, but most of them which were entirely exposed to the fire did not appear to have burned at all. In the top of the new elevator the absence of evidence of fire would indicate that there had been no blaze here if it were not for an occasional lot of brown dust. One of the most interesting manifestations was a single small rope which had been spliced and hung down in the middle of the room. The free sisal fibres of this rope had been burned off, while the nearby fine dust accumulated to a depth of ¼-inch on a concrete column was unburned and undisturbed. This indicates that the fire had burned sufficient oxygen out of the air to render it incapable of combining with dust at the temperature attained, although sisal could smolder.

The origin of the fire is the common interest from the fire insurance standpoint, but a superficial examination of the several elevators of this property will show abundant possible cause of ignition, such as bearings, very long wide belts which by moving only a small amount can come in contact with the steel cases in which they are contained, unprotected electric light globes, flashes from passenger elevator starters, static sparks in the dry atmosphere of this cold climate, and all kinds of foreign materials that come in with the grain, including matches and cartridges. I was informed that not infrequently loaded cartridges are found in the grain and that in one case a small explosion occurred in a grain tank which did no harm, but upon opening the tank a smell of powder was noticed and it was suspected that a cartridge had dropped with the grain 100 ft. to the bottom of the tank, thereby being exploded and causing a slight dust explosion.

The grain tanks which are in constant use cannot accumulate much fine dust, as the scouring action of the grain on the sides of the tanks keeps them clean. A dangerous condition may be developed by sweeping dust into these tanks, which it is understood is done, as the Board of Trade laws do not allow removal of dust from the grain.

The explosion occurred when the lower part of the older elevator under the grain tanks was being cleaned in preparation for the winter. Comparatively little is done after the St. Lawrence river freezes. The sweeping down of the fine dust on the side walls and ceiling brought considerable fine dust into the atmosphere. There was no damage in the lower part of the elevators. The explosion immediately flashed to the top where it extended the entire length of both elevators.

The cleaning which was in progress was evidently fully as important a feature as the spark which caused the explosion. Obviously in order to keep an elevator clean it must be cleaned from time to time. If this is done by common methods, with brooms, it will be necessary to stir up the dust. This suggests the practicability of a vacuum system which can be so designed as to reduce the labor of cleaning and at the same time automatically separate the dangerously fine dust which forms an insignificantly small percentage of the total weight of dust, probably not over one per cent. The coarse and less hazardous dust can then be returned to the grain if its removal is objected to by the Board of Trade. This method of removing the dangerous fine dust was suggested by Mr. Thomas D. Budd.

In a suction ventilating system for grain dust a high air velocity in the pipes will probably be

necessary to scour the walls and prevent the adhesion of fine dust.

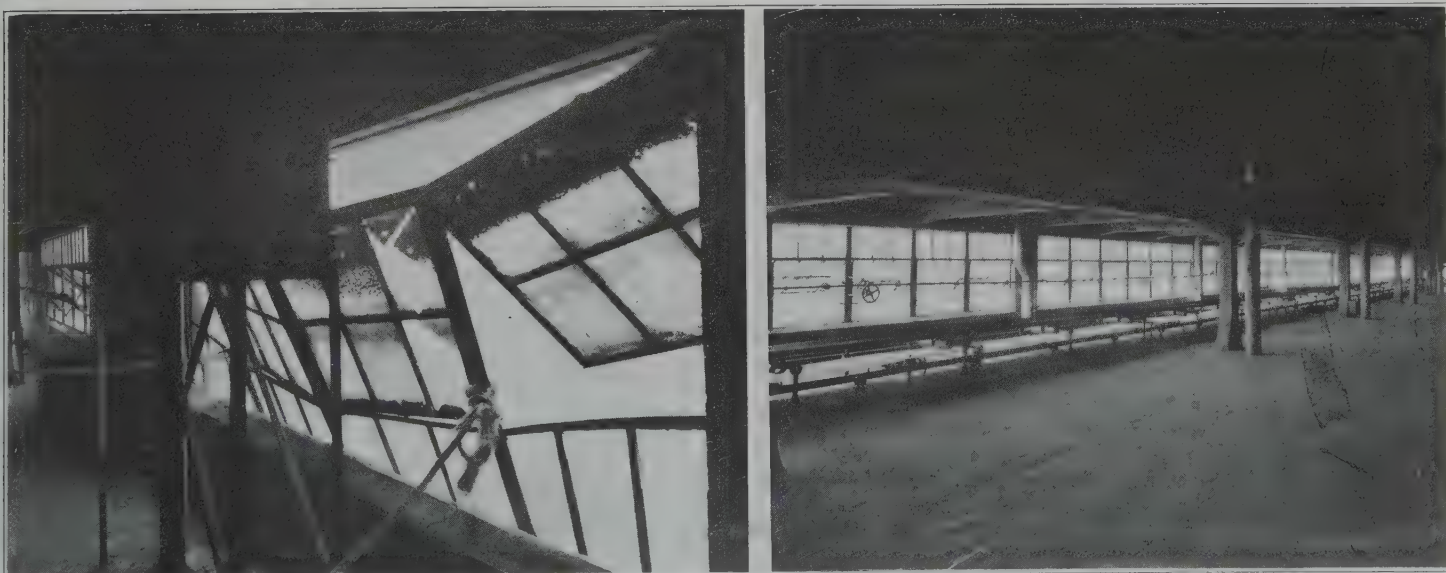
It is understood that there has only been one other explosion in this group of four elevators now belonging to the Harbour Commission. This occurred October 28, 1921 in No. 1 elevator and the loss was about \$12,000.

There are two places in the old elevator where the concrete floors were broken. One was over a grain tank and the other was over a garner. Most of the grain tanks were full in both elevators, therefore they contained little free air space, and the tight-fitting steel covers prevented agitating the small amount of dust in the tanks. Apparently in the two places where the concrete was broken the explosion was not very rapid. It is suggested for investigation whether the somewhat brittle concrete may not be broken by an explosion which develops only a moderate pressure. At the explosion of the Armour elevator in Chicago there were many examples of massive concrete being broken, and the idea conveyed was that the explosion was very rapid. The size of the dust particles and the action of the vent windows in this elevator indicates that this is not the case. This is also indicated by the fact that some of the windows shown in the engravings herewith which were not self-releasing were pushed out of the concrete wall and much of the plain glass they contained was unbroken.

That concrete panels can be very badly broken without very rapidly applied or high pressure was shown in an explosion which occurred in a fuel oil tank vault at the Canadian Locomotive Works in Montreal some years ago. The 4-in. concrete panel on top of this vault was completely shattered and yet a man who was in the vault at the time cleaning it was not seriously hurt.

All of this evidence as well as the behavior of the windows here indicates that comparatively simple vent windows will take care of a grain dust explosion if they have sufficient area and the area required is a function of the volume of air contained in the building protected. Our experiments at Everett have shown that the temperature in the Test House is practically a constant and dependent upon the amount of air in the building, not on the material burned. Conveniently opened windows have the added explosion-preventing quality of encouraging ventilation by which the fine dust is constantly removed from the building.

It is proposed to get as much dust as possible from the inside of pulleys and to free it from the grease which keeps it coagulated and make some large size experiments at our Test House at Everett, determining not only the explosion pressure but its approximate velocity. We have been using a door at our Everett tests which will open by the force of an explosion, closing again and holding in the inert gas. The reclosing is evidently unnecessary in these incombustible elevators in which there is practically nothing to burn after the explosion, but such a self-closing door will be useful on the grain tanks in which a smoldering fire may linger, causing smoke which will induce firemen to pour water into the tanks. Apparently this is the chief source of loss in this case, and it is impossible as yet to make any estimate as to how much it will amount to. The firemen were using hose streams for 24 hours after the explosion and considerable of the water was either directly put into the grain tanks or found its way into them through the broken concrete top or open covers. When this water shall have set up a fermentation in the tanks the grain will not only be destroyed but it will be difficult to get it out, as it will cake. If



At Left: Fixed Windows Blown Out of Frames. At Right: Self-Releasing Windows Opened Without Damage by Explosion in Elevator B, Windmill Point, Montreal, Que.

these tanks were provided with such doors as we have at Everett which would open by the force of an explosion and then close again, holding in the inert atmosphere formed, the fire could be extinguished without the use of water and no damage whatever would be sustained by the grain. It is possible that vents could be placed on top of the tanks and open directly into the large open room above them. A better arrangement would be to have the doors open to the outer air. This can be readily arranged in the smaller elevators which have only two rows of grain tanks, but in the larger ones with four or more rows of tanks the only possibility would be to vent them through large pipes to the outer air with self-closing dampers.

The loss here is estimated at \$50,000, although this is very largely a guess, as the amount of grain damaged is unknown. If there is a considerable amount of it the loss will probably be greater than the estimate.

In the new part of the elevator protected by the self-releasing windows the loss to buildings and machinery is practically nothing. What there is consists of window glass broken mostly by the firemen to let the smoke out, but it would have been possible to have started up this elevator an hour after the explosion by simply closing the open windows and starting the machinery. It depends on the old elevator for the weighing and receiving apparatus.

Conclusion. The velocity of an explosion in a grain elevator is of fundamental importance in designing protection. If it is slow enough to admit of the use of self-acting vents the practical protection of such property is simple, as it will simply require the determination of the ratio between the cubical contents of the room and the vent area required. Windows which remain open after an explosion, allowing dislodged dust to be carried away by the air and thereby preventing a second explosion are probably preferable in incombustible buildings without combustible occupancy, while in tight grain tanks self-closing shutters would be necessary to stop smoldering and prevent the use of water.

Southeastern Pennsylvania Dealers Meet.

Approximately 75 members attended the Lansdale, Pa., meeting of the Southeastern Pennsylvania Feed Dealers Ass'n.

Frank Jones, sec'y of the state ass'n, discussed the ruling on the re-consignment or penalty charge for failure to deliver Bs/L within 24 hours.

J. P. Fischer, Douglasville, discussed "Principles of Conduct."

Mr. Acker, Paoli; Mr. Miller, Collegeville, and Mr. Rosenberger, Doylestown, discussed the margin of gross profits on which a feed dealer should operate.

Delivery costs were discussed and the point that dealers should keep accurate cost records on all departments of their business, strongly emphasized.

C. W. Wager, Philadelphia, told about the meeting between feed dealers and extension representatives at New Brunswick, N. J. It was suggested a similar meeting be conducted in Pennsylvania.

At the dinner that followed Mr. Howells described the days when water wheels were used for power. J. T. Ebert, vice-pres. Norristown Trust Co. and Prof. E. J. Williams, pres. Lansdale Council, also spoke.

Practices of Federal Commission Need Modification.

The report by the Federal Trade Commission to Congress for the fiscal year does not contain the criticism of the work of the Commission by Commissioner Gaskill, the majority of the Commission having refused to allow his statement to be incorporated in the report.

The report of the Commission admits, for example that the complaint against the Photo Engravers Club of Chicago issued Mar. 13, 1918, and the subsequent complaint against American Photo Engravers Ass'n, had not been disposed of during the five years before the publishing of the report, and that hearings were contemplated in 1924, 6 years after the complaint. Commissioner Gaskill points out that under its present methods the Commission will have an increasing carryover of untried cases. He suggests the following remedy:

I am strongly of the opinion that if the nature of the Commission's proceedings is changed from that of a charge of violation of law to an inquiry whether or no the law has been or is being violated under given circumstances and conditions by the indicated practices, and the Commission be given power instead of issuing a charge of violation of law, to serve a formal notice of inquiry upon the parties effected or concerned and thereafter either to accept their acquiescence upon a proper stipulation or to issue an order covering the facts disclosed by the inquiry, which may be as the order now is, the basis of judicial review, that the Commission's processes may be expedited materially; that their cost may be reduced; that their injury to the business world may be minimized; and the effectiveness of the Commission's operations materially increased.

In addition to the change from the formal judicial method, the trade practice submittal or conference might well be raised from its informal position to a status in which it would become the most effective means of affording relief from the use of unfair methods of competition. At the present time the trade practice submittal is a device created by the Commission, the weakness of which is indicated by its very title. Realizing the impossibility of an agreement between the Commission and a business group for the elimination of an unfair method of competition by action of the individuals composing the group, instead of calling this meeting a "conference" it has been designated as a "submittal."

The results of these conferences are shown in resolutions adopted by the representatives of the industry covered, which are then published if and when approved by the Commission, for the guidance of the industry. The Commission endeavors so far as it can to support the resolutions of such a conference by accepting these declarations as statements of the opinions of the trade, using such statements as evidence in support of complaint against others in the trade who do not accord with the majority or refuse to reform their practices in response thereto. It frequently happens that these practices of which industry desires by its own motion to be rid, are such that it is exceedingly difficult for the Commission to bring the evidence in support of its complaint issued against violators of this trade established rule, within the requirements of the common law rules of unfair competition. The result is that the splendid effort on the part of a business group to advance its methods and practices may be defeated by the action of two or three or a minority of the trade because the expression of the majority is in such form or reaches to a matter which the Commission may not enforce as a part of the accepted law.

Nevertheless this trade practice submittal

contains the germ of an effective and voluntary cooperation among business men for the advancement of their own methods and practices, which is an expression of self-government in such high terms that it should be met and encouraged in every possible way.

Carriers Finish Good Year.

The acme of efficiency in the operation of American railroads was reached in 1924, according to the report of the American Railway Ass'n. Condition of the roads permitted the utmost economy and 10 new records were established during the year. Sufficient profit was made so that capital expenditures of \$1,100,000,000 for improvement and expansion could be authorized. Yet the shippers were saved money. The American Railway Ass'n says:

Translated into dollars this operating efficiency amounted to a saving to the shipping public of approximately \$600,000 in reduced freight rates alone as compared with the rates in effect in 1921. What the total saving has been, due to this continued efficient management, it is impossible to estimate until reports for the year are complete. That it has amounted to hundreds of millions is a conservative estimate.

As in 1923 the railroads during the last year failed to realize the moderate return contemplated, under the existing level of transportation charges. Net operating income of Class 1 carriers in 1924 was approximately \$970,000,000, or 4.30% on their property investment. The earnings of the Class 1 carriers in 1923 were \$977,657,000, or 4.47%.

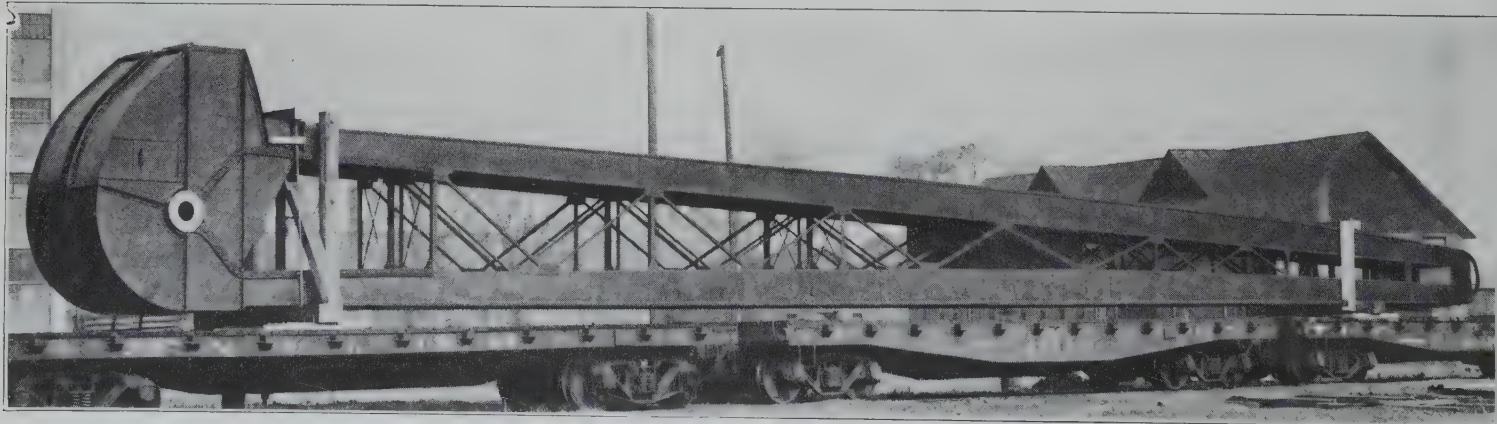
An Unusual Shipment.

Illustrated herewith is an unusual shipment of two 25,000 bushels per hour capacity marine legs which were shipped from Mishawaka to Oswego, for the new Terminal Elevator being built at that port.

Owing to their length, three cars were required to ship same—the center car merely acting as a spacer. The two end cars carried the load at one fixed point on each car, the upper end being rigidly anchored to the car in a turntable fashion—the bottom end resting on a single sleeper so carried as to permit the legs to slide endwise as well as to rotate about the support.

When the shipment neared its destination, it was found that the tunnel entering Oswego did not provide the necessary clearance to take both legs at once. The Railroad Company, at the loading point having accepted shipment, had one leg removed and the remaining leg placed in the center of the cars in which manner shipment was completed without further complications, the second leg being re-loaded and shipped in the same manner. The legs are 104 ft. long and weigh approximately 70,000 pounds. The specifications require that the legs be fabricated complete in the shop and that shipment be made in one piece.

The legs were for James Stewart & Co. Inc., engineers and general contractors for the New York State Barge Canal Terminal Elevator, at Oswego. They were fabricated by the Dodge Manufacturing Corporation.



Twin Marine Legs for the State Barge Elevators at Oswego, N. Y.

Grain Trade News

Reports of new firms, changes, deaths, casualties and failures; new elevators, new flour mills, improvements, fires and accidents are welcome. Let us hear from you.

ARKANSAS

Pine Bluff, Ark.—Three times in three successive days the Whyte Feed Mills suffered from fire loss in its warehouse. Somehow the flames of the last blaze originated within sacks of alfalfa meal. Between \$1,500 and \$2,000 will probably cover the loss.

CALIFORNIA

Ventura, Cal.—Daane & Orr have commenced arrangements for the construction of a new grain warehouse.

Los Angeles, Cal.—Charles G. Glenn is now connected with the Sperry Flour Co. He was formerly with the West Coast Grain Co.

Petaluma, Cal.—A get-together meeting and banquet was held here Dec. 18. The attending grain and feed men were entertained by Ratto Bros. Trade problems were discussed.

Madera, Cal.—A new improved feed grinder, a larger motor, and a cyclone dust collecting system have just been installed by the Valley Feed & Fuel Co. in its warehouse. The firm will grind all of its own feed, in addition to custom grinding, whereas heretofore prepared feeds were purchased and then mixed.

CANADA

Regina, Sask.—The Saskatchewan Co-operative Elvtr. Co. is going to open offices in London and Liverpool soon.

New Westminster, B. C.—A small grain hospital elvtr. for the handling of sacked grain is contemplated at this point.

Granum, Alta.—J. Healy, mgr. of the Robin Hood Mlg. Co.'s elvtr., nipped a blaze that commenced ravenous destruction in the engine room at the plant, undoubtedly saving the properties.

London, Ont.—A \$750,000 loss was suffered on the 1,200-bbl. flour mill of Hunt Bros., Ltd., when it burned Dec. 30. Some 100,000 bus. of grain and 8,000 bbls. of flour were also included in the insurance adjustment.

Blackie, Alta.—Fire completely destroyed the elvtr. of the Pioneer Grain Co. Dec. 30. Some 30,000 bus. of grain were in the house at the time, two-thirds of which storage was in wheat. The damage is placed at \$50,000, insured.

Owen Sound, Ont.—A majority of 10 to 1 of the voters here favored a by-law to erect a million-bushel elvtr. at a cost of \$450,000. Upon completion the structure will be sold to a group of local firms, to be paid for in twenty annual installments.

Winnipeg, Man.—Princess Patricia's Canadian Light Infantry Band played some eleven numbers on the trading floor of the Winnipeg Exchange commencing at noon Dec. 31 and accompanied by the whiz of flying streamer played ticker tape, in celebration of the last day of 1924. Fifteen minutes' intermission, from 1 to 1:15 o'clock, was set aside to close the market in fitting style.

Fort William, Ont.—Charles Birkett, former sec'y of the Dominion Board of Grain Commissioners at Fort William and sec'y of the Fort William and Port Arthur Grain Exchange, was found dead in a Toronto hotel New Year's night. Mr. Birkett was very active in municipal, provincial and dominion affairs as well as in a host of private circles and was always considered a irreproachable leader. He was a member of the Fort William Board of Trade.

St. John, N. B.—Grain conveyor galleries involving an expenditure of \$130,000 are being built for the Public Works of Canada to connect onto Pier No. 15 across the head of the dock to Pier No. 16 and down along the face of No. 16 Shed supplying Berth No. 16 with grain conveyors. The grain handled is supplied from a concrete elvtr. owned by the Canadian Pacific Railway. Boone & MacDonald, local engineers and contractors, are doing the work.

COLORADO

Flagler, Colo.—We are repairing our fire damage now.—Flagler Equity Co-op. Ass'n.

Buckingham, Colo.—An overheated stove caused the blaze that burned the elvtr. of the Buckingham Farmers Co-op. Elvtr. Co. Dec. 28. The fire was discovered between two and three o'clock in the morning. In addition to their own stock they had about 50,000 lbs. of beans owned by the Trinidad Bean & Elvtr. Co. and about 300 bu. of wheat owned by the Colorado Wheat Growers. This was the only elvtr. in town. It is not expected that they will rebuild this year.

IDAHO

Oakley, Ida.—The capital stock of the Oakley Mlg. & Elvtr. Co. has been increased from \$15,000 to \$75,000.

ILLINOIS

Barry, Ill.—Geo. Oitker is now associated with Eldon Bonifield Feed & Grain Mill.

Alta, Ill.—The Farmers Elvtr. Co. lost its elvtr. by fire on Jan. 2; loss \$20,000, fully insured.

Harper (Forreston p. o.), Ill.—Fire damaged the elvtr. of the Harper Grain Co. slightly on Christmas eve.

Peoria, Ill.—The Farmers Grain Dealers Ass'n of Illinois will convene Feb. 10 to 12 at the Jefferson Hotel here.

Oswego, Ill.—I am now mgr. of the Oswego Farmers Grain Co. A. H. Dysart formerly held this position.—C. A. Hunter.

Sublette, Ill.—Edward Reeser was re-employed as mgr. of the Sublette Farmers Elvtr. Co. at a recent meeting of the directors.

Chatsworth, Ill.—The Gray Produce Co. has purchased a building of John Bergan and will conduct a feed, flour and produce business therein.

Bridgeport, Ill.—The Cooper Elvtr. Co.'s elvtr. was sold Dec. 27 to a grain firm of Decker, Ind. J. D. Griggs, the former owner, has taken up farming.

Moweaqua, Ill.—M. C. Elcan of Sioux Falls, Minn., has been hired as mgr. of the Farmers Co-op. Elvtr. Co. to succeed Charles Ahl. Mr. Ahl has retired on account of ill-health.

Decatur, Ill.—The Decatur Terminal Elvtr. Co. has been incorporated for \$100,000 to deal in grain and operate grain elvtrs. Incorporators, O. I. Ferris, M. E. Murphy and E. E. Stuart.

Marley (Mokena p. o.), Ill.—Edward Marshall and Louis F. Sass operate the elvtr. belonging to the Alex Haley estate and formerly operated by him, but do not own it at present. —Louis F. Sass.

Upper Alton Station (Alton p. o.), Ill.—Joseph Nevlin was instantly killed by a Chicago & Alton flier which ran into the automobile in which the grain dealer was crossing the tracks.—P. J. P.

Byron, Ill.—The elvtr. of Farmers' Elvtr. Co. is scheduled to close the first of January unless the stockholders raise money to cover the company's indebtedness. Efforts are being made to keep the plant open.

South Clinton (Clinton p. o.), Ill.—Mail addressed to Charles Harper, purchaser of the Edward Hendrix elvtr. at auction as reported in the Dec. 10 number of the Journal, has been returned marked "Unclaimed."

Pierron, Ill.—We are the only grain dealers here. The two men reported in the last issue of the Journal as entering our field will eliminate grain from the products they handle.—Pierron Co-op. Equity Exchange.

Wilmington, Ill.—The Wilmington Farmers Grain Co. has organized with the purpose of dealing in grain, seeds, hay, live stock, coal, lumber and all farm produce. Capital stock, \$18,000; incorporators, J. W. McIntyre, George Phillips and Wm. Godel.

Taylorville, Ill.—The mill of the McKenzie Mlg. Co. will not be taken over by the newly incorporated Illinois Mlg. & Elvtr. Co., according to Charles M. McKenzie, one of the incorporators of the former concern. Offices will be maintained at Springfield.

Sutter Siding (Hopedale p. o.), Ill.—The Sutter Siding Grain Co. of Minier, Ill., is now the name of the Farmers Grain Co. which was taken over by local men, as reported in the last number of the Journal. George Bender is sec'y thereof.—R. W. Hodson, mgr.

Peoria, Ill.—On January first P. B. & C. C. Miles celebrated its fiftieth anniversary. Both of the founders, Mr. P. B. Miles and Mr. C. C. Miles, are still actively engaged in the conduct of the business. Brothers and sons, Grant, William and Joseph C. Miles, have joined and reinforced the organization.

East St. Louis, Ill.—The warehouse of the Corno Mills Co., reported to have been damaged by fire in the last number of the Journal, was a five-story building. The blaze was confined to the top floor and the elevator shaft. The loss, largely water damage on grain, grain products and flour stored in the structure, amounted to \$10,000; covered by insurance.

CHICAGO NOTES.

The Zimmerman Commission Co., headed by Louis W. Zimmerman, has discontinued business.

Jerrie D. Stelle, veteran doorkeeper on the floor of the Chicago Board of Trade for the past forty years, died suddenly Jan. 1.

Charles A. Peck has become a partner in the firm of E. Newman & Co. For the past two decades he has been associated with A. J. White & Co.

The newly organized Faroll Grain Co. has taken offices at 807 Postal Telegraph building. The concern will operate the transfer elvtr. at Schneider, Ind.

Patrick H. Monks, commercial agent of the Michigan Central and New York Central railroads for the past 47 years and well known in grain circles here, died Jan. 5.

Thomas J. Cannon, broker on the Board of Trade floor for the past 35 years, died here a few days ago. Of late he has been connected with the Internal Revenue office.

John F. Brennan is now a general partner in the firm of Stein, Alstrin & Co., having become so associated on Jan. 1 of this year. He was admitted to membership in the Chicago Board of Trade on Dec. 23.

E. R. Anderson is superintendent of the Midwest Elvtr. at 56th St. and Stewart Ave. In the earlier December number of the Journal it was reported that Frank J. Delany had purchased the plant for feed mixing.

Exclusiveness and privacy are the features of the offices in the Illinois Merchants Bank Building opened Jan. 2 by the new grain, stock, cotton and bond firm of M. W. Samuels & Co. Mr. Samuels was formerly connected with Jackson Bros.

Board of Trade dues have been raised \$75 over those of last year. The increase is attributed to the expense of opening the cotton exchange and other costly features of the program of improvement being carried on. This will bring the fees up to \$250 per annum.

The memberships of the following former members of the Chicago Board of Trade have been transferred: Jesse H. Ridge, Burton F. Hales, Wilson F. Henderson, Frederick W. Croll, John J. Mitchell, Wm. T. Fraser, E. B. Timberlake, Geo. A. Willard and P. P. McLaughlin. Those admitted to membership within the past month include: Lee Rosenberg, Reginald C. Jenkins, James T. Hamill, John L. Patten, John T. Donahoe, Joseph W. Evans and Paul Schwarz. Those suspended are: Thomas M. Owsley, James McFarlane, John H. Ehrhardt, E. A. Beauvais, W. J. Brainard, James E. Cagney, Howard E. Colgan, Wm. C. Foley, Jr., Frank F. Wood and Harry F. Todd.

Frank L. Carey was re-elected pres. of the Chicago Board of Trade at its annual election Jan. 5. Henry A. Rumsey, who retires from the directorate, was chosen second vice-president succeeding Frederick S. Lewis, who now is first vice-president. James K. Riordon was re-elected to another three-year term as a director. One other nominee on the "regular" ticket, namely Francis B. Fox, was also picked as a director along with three from the "petitioned candidates" entries, which were Louis C. Brosseau, Edward P. McKenna and Frederick C. Miley. The "hold-over" directors are Charles H. Stone, Ed. D. McDougal, Edwin A. Doern, J. Edward Wynne, Parker M. Paine, David Howard Lipsey, E. D. Norton, Harry H. Lobdell, James A. Begg and Frank E. Alstrin. The newly elected members to the Com'te on Appeals are: George E. Booth, Harry C. Schaack, Fred T. Bascom, John E. Brennan and Harry B. Godfrey. Those that remain on this com'te by virtue of last year's election are: John J. Stream, Harry B. Shaw, Frederick G. Winter, Edward P. McKenna and John A. Low. The following were chosen as members of the Com'te on Arbitration: Alex Moore, Philip J. Reddy, Fred F. Breckenridge, William M. Hirshey and Kenneth S. Templeton. They will serve with Frank G. Coe, Horace L. Wing, Orrin S. Dowse, George A. Koehl and E. C. Wittman. The new Com'te on Nominations is represented by Joseph W. Badenoch, Allan M. Clement, Joseph Simons, Frank G. Coe and Joseph F. Lamy.

INDIANA

Poneto, Ind.—The Farmers Elvtr. Co. has filed certificate of preliminary dissolution.

Franklin, Ind.—The site of the old Dunlap & King elvtr. has been sold by the Farmers Elvtr. Co. for a factory.

Rockport, Ind.—The Rockport Mfg. Co.'s plant will not be rebuilt. Fire destroyed the properties a few months ago.

Monroeville, Ind.—John T. Niezer, 54, died recently. He was connected with the Niezer Grain Co. operating elvtrs. here.

Lafayette, Ind.—The Farmers Grain Dealers Ass'n of Indiana will hold its 1925 convention at the Fowler Hotel Feb. 17 and 18.

Silver Lake, Ind.—I expect to make some improvements in the near future in the elvtr. I just bought from J. E. Gall.—J. C. Grubb.

Muncie, Ind.—A heating stove caused the flame that destroyed the mill building and the machinery of the Andrews Flour Mills. The loss is figured at \$18,000. No grain nor flour was in the house.

Topeka, Ind.—Since the death of W. E. Hall, Nov. 26, I have been mgr. of the elvtr. here for Nathan Wolf & Co.—J. W. Hooley.

Atlanta, Ind.—The building formerly occupied by the flour mill of A. G. Walton is being converted into an elvtr. The machinery is being removed.

Moscow (Milroy, R. F. D.), Ind.—Fire destroyed the John Nipp, Sr., feed grinding mill here Dec. 31. The mill was erected two years ago and no insurance was carried on it.

Sulphur Springs, Ind.—The Wilson Grain Co. has been incorporated for \$15,000 by C. T. and E. I. Wilson, and J. H. Trimble. The company purchased the house of the Sulphur Springs Grain Co. in November.

Edinburg, Ind.—A farmer of Manilla is suing the Martin Cutsinger Grain Co. for payment of 47 bus. of wheat claimed to have been stolen from him and sold to the company. The thief is serving a sentence in the state prison for the robbery.

Indianapolis, Ind.—Six prizes were offered, tho 18 were awarded, to the winners of the Bert A. Boyd Grain Co.'s Christmas cross word puzzle. In presenting the solution of "Our First Cross Words with the Grain Trade" the Indianapolis commission house wished "Kind" words, instead of cross, to all.

Indianapolis, Ind.—The first session of the Indiana Grain Dealers Ass'n will start at 1:30 on the afternoon of the 15th of this month. The Board of Trade convention rooms will be used. A banquet will be held that same night. The session will cover two days. The program appeared in the last number of the Journal.

Arlington, Ind.—The partnership of Lowell and Ross Hutchinson, doing business as Hutchinson & Son, has been dissolved, and Lowell Hutchinson will continue the business under the same name as before. Ross Hutchinson is now in charge of the flour mill and retail and jobbing feed business of Clark & Kirkin at Cambridge City, Ind.—Elmer Hutchinson.

Peru, Ind.—We will rebuild our mill this spring and will install new equipment throughout. The capacity will be the same as that of our old mill, i. e., 200 bbls. Fire and water did much damage to our machinery in the recent fire we had. The Hite Bros. are building an addition to their mill and will put in a small flour mill and complete corn and feed outfit.—J. C. Hite, successor to Peru Mfg. Co.

Indianapolis, Ind.—The Board of Governors of the Indianapolis Board of Trade are urging the enactment of legislation providing for the establishment of a state rural police and for the regulation of commercial vehicle traffic and centering such regulation in the public service commission. A resolution opposing the enactment of a law by congress to prevent the printing of return addresses on government stamped envelopes was adopted. The "Safe Investment" drive was approved.

Summitville, Ind.—The Hinshaw Grain Co. is now the name of the Gordon Grain Co. Capital stock has been increased from \$15,000 to \$30,000. In the Nov. 25 number of the Journal it was reported that Logan Hinshaw had purchased the elvtr. of the Summitville Grain Co. and consolidated it with the Gordon Grain Co.'s elvtr. One house is being used for storage purposes alone. Complete new grinding machinery was installed in the other house. Mr. Hinshaw manages both establishments.

Elwood, Ind.—We have leased the elvtr. and feed mill of Harting & Co. and will run it as before, adding new lines. We manufacture a great part of our feeds and distribute a commercial brand put out by a tin plate factory here. The Harting Co. has been in business for 42 years. Sickness is the cause of the change. John O. Kiefer, the proprietor, has been in the feed business here for the past 7 years. Both places of business will continue to be operated.—Kiefer's Feed & Supply Co.

IOWA

Auburn, Ia.—The Farmers Grain Co. is considering discontinuing business.

Galbraith, Ia.—A new home will be built by the Kunz Grain Co. for its mgr. here, Bert J. Sankey.

Bingham (Shenandoah R. D.), Ia.—The J. Auracher elvtr. has been sold to Oscar and Ira Dougherty of Norwich.

Hartley, Ia.—Mann & Mann is the new name of the firm that succeeded E. Mann or Mann Elevators at this point Jan. 1.

Spencer, Ia.—Claude B. Martin is mgr. of the office and grain branch of the La Budde Feed & Grain Co. of Milwaukee, opened here Jan. 2.

Tama, Ia.—A receiver has been asked for the Farmers Co-op. Co. of this place. The company suffered heavily through fire loss a few years back.

Algona, Ia.—I have taken over the coal sheds of D. L. McDonald and will operate them in connection with the grain and feed business.—Fred Anderson.

Conesville, Ia.—We may install motor power in our elvtr., though the indications of such probability are negative at present.—McKee Grain & Lbr. Co.

Knierim, Ia.—John Engleman will finish Albert Arenson's term of office as mgr. of the Farmers Grain & Coal Co. The retiring mgr. entered the banking field.

Winterset, Ia.—The elvtr. of Hylton & Wilson Grain Co. that was razed in 1923 has not been rebuilt to date. No new concerns have taken this one's place.—X.

Racine (Alden p. o.), Ia.—The name of the Farmers Grain Co. of Racine has been changed to the Farmers Co-op. of Racine. The company is now strictly co-operative.

George, Ia.—Henry V. Behrends now entirely owns the elvtr. business known as Spracher & Co. The other half-interest was obtained just before the first of the year.

Dumont, Ia.—The capital stock of our company has been increased five-fold. It was \$10,000.—J. A. Thompson, mgr., Farmers Grain Co., formerly the Farmers Inc. Co-op. Society.

Onawa, Ia.—Fire, Jan. 6, totally destroyed the Roush Mill, also known as the Onawa Mills. Some 10,000 bus. of wheat, 5,000 50-lb. bags of flour were lost in addition to the building and machinery. Dust combustion is supposedly the cause.

Jefferson, Ia.—A dislocated shoulder and many bruises resulted to P. U. Benard, mgr. of the Farmers Elvtr. Co., when on a tour of inspection with the directors through the company's closed plant. A box was placed immediately in front of the opened pit door and it was over this impediment that Mr. Benard stepped to his downfall.

Alton, Ia.—I have purchased the Alton Elvtr. Co.'s elvtr. and will do business in the name of Steckler Elvtr., Grain & Seeds.—Casper Steckler. (Mr. Steckler comes from Draper, S. D., and is reported to have purchased the above mentioned elvtr. over a year ago of R. P. Dethmers, though is just now taking over operations. He has been engaged in the grain business some 15 years in all, having operated an elvtr. at Avon, S. D., most recently.)

KANSAS CORN

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ledo, Ia.—The Toledo Farmers Elvtr. Co. been dissolved. The company's elvtr. was to the Mesquakie Mlg. Co. nearly a year. M. J. Krezek was elected trustee of the corporation.

ew Hartford, Ia.—The right jaw of one of the proprietors of the New Hartford Elvtr., ward B. Good, became fractured the day before Christmas when he fell on a hand-truck being used for unloading a carload of meal. It was necessary to remove several teeth to reduce the fracture.

KANSAS

lenlo, Kan.—I took charge of the Menlo Farmers Union Co-op. Ass'n on Jan. 1.—H. E. Buns, mgr.

arned, Kan.—Harry C. Caywood, superintendent of the Keystone Mlg. Co.'s plant here, died Dec. 28.

owa Point, Kan.—Fire originating in the line house of the A. J. Elvtr. Co.'s elvtr. caused slight loss Dec. 19.

utchtinson, Kan.—The Kansas Farmers Grain Dealers Ass'n will meet in the Grain Exchange here Feb. 26 to 28.

Quinter, Kan.—Orrin Roesch is assisting his father, Claude, in the operation of the Robson-Wyatt Elvtr. Co.'s elvtr.

Bronson, Kan.—The Bronson Grain Co. contemplate the installation of a feed grinder.—Bureau Grain Co., Moran, Kan.

Hoyt, Kan.—Geo. Hall, owner of the old Inters Elvtr., will rebuild at once. He lost the above mentioned house in December.

Bluff City, Kan.—Our elvtr. was not damaged by wind nor was there any flood here.—W. Cinton, mgr., Red Star Mlg. Co.

Dlcott, Kan.—The Gano Grain Co.'s elvtr. closed down until next season. Arthur Maus, the mgr., is working elsewhere.

Abilene, Kan.—A small fire originated in a bin in the office of the Security Flour Mills Co., doing slight damage elsewhere.

St. Paul, Kan.—W. E. Johnson is the new mgr. of the Farmers Co-op. Elvtr. Co. J. E. Hill, former mgr., died but a few weeks ago.

Falun, Kan.—We have recently installed a motor in our elvtr.—R. E. Terry, mgr., Farmers Union Co-op. Grain, Livestock & Merc. Ass'n.

McPherson, Kan.—C. A. Hiebert, president of the Wall-Rogalsky Mlg. Co., died suddenly Jan. 4 following an emergency operation for peritonitis.

Hugoton, Kan.—The Security Elvtr. Co. has purchased the Hugoton Warehouse Co.'s warehouse for storing and shipping broomcorn. H. Tilford is mgr.

Miltonvale, Kan.—Joel Dobbs, formerly operating elvtrs. at Virginia City, Neb., and McArthur and Dunavant, Kan., died recently following a stroke of apoplexy.

Cunningham, Kan.—The Clark Burdg Elvtr. Co. hereafter be known as the Cunningham Grain Co., the property having changed ownership into the hands of local capital.

Clayton, Kan.—The C. E. Robinson Grain Co. of Salina has just completed a new 20,000-bu. modern elvtr. at this point. W. T. Hendrickson is local mgr. of same.—J. E. Rule.

Talmo, Kan.—The elvtr. here formerly owned by W. R. Bullen of Concordia, is now owned by himself and operated under the name Talmo Grain & Coal Co.—J. B. Sherwood.

Bazine, Kan.—The pit for an elvtr. has been completed for Geo. Stullken. The house is being put up on the site of the old coal yards. The number is on the ground.—Farmers Grain & Supply Co.

Clifton, Kan.—C. N. Bunds of Wetmore has purchased the Chas. S. Gill 80,000-bu. elvtr. and will operate it as a transit house in connection with his line of elvtrs. in northern Kansas.—Chas. S. Gill.

Seneca, Kan.—Mail addressed to Ed. Follwell, who was reported to have been one of the partners operating the elvtr. leased from the Farmers Union Elvtr. Co., has been returned marked "Unclaimed."

Falun, Kan.—After 52 hours' deliberation the jury trying the case of Hugo Hed was discharged. Mr. Hed was former mgr. of the Farmers Elvtr. Co.'s elvtr. here, and is charged with the embezzlement of \$7,283.46 of the company's funds.

Arlington, Kan.—E. F. Kilmer of Brenham will become mgr. for the Farmers Co-op. Exchange on Jan. 1. I have been mgr. for them for the past four years, but resigned to take effect on that date to become mgr. of the Arlington Mill & Elvtr. Co.—E. C. Beauchamp.

Maize, Kan.—The Farmers Grain & Supply Co.'s elvtr. was sold at sheriff's sale and bid in by the Maize Grain & Supply Co., a newly incorporated organization with a capital stock of \$7,500. The new company has operated since July 2, having leased the elvtr. on a bushel basis.

Pauline, Kan.—The Farmers Elvtr. Co. let contract to the Federal Engineering Co. to install one 5-h.p. and one 20-h.p. motor, corn sheller, cleaner, dump, pit and corn leg, and to enlarge the plant for the above corn handling machinery. This includes wiring for power as well as lights. Work has commenced.

Humboldt, Kan.—The elvtr. recently completed for the Humboldt Elvtr. Mills, of which W. L. Drake is now sole owner and operator, was shut down in order that a new sheller and drag might be installed. The old one tore itself to bits. J. T. Borton made the new installation and other changes in the new house.

Ford, Kan.—We plan to build a new elvtr. and shall probably let contract in the next few weeks. The house will be an iron clad frame construction building of between 15,000 and 20,000 bus. capacity. The latest design of structure and of handling machinery and equipment will be had.—J. L. Hipple, mgr., Ford Co-op. Exchange.

Wilroads, Kan.—W. H. Gould of the Gould Grain Co., Dodge City, Kan., lost a 10,000-bu. grain elvtr. here shortly before Christmas. The elvtr. building was of frame construction, erected nine years ago by the present owner. Metal sheeting had just been shipped to cover the building. The grain within the structure was fully covered, however little insurance protected the building investment against loss.

Louisburg, Kan.—Some 20 fifty-pound sacks of flour were taken from the warehouse of the Louisburg Elvtr. Co. at 5 a. m. Dec. 22. The invaders held the key to the building. A quantity of coal was also missed, however this is reported to be a common occurrence. Six weeks ago some \$17.00 was taken from the cash drawer by similar talent, which is presumed to be local. Some time back the company lost its adding machine.

Stilwell, Kan.—Buford U. Kirby, who was reported to have purchased the 20,000-bu. elvtr. of the Farmers Elvtr. Co. at this point, owned and operated the elvtrs. at Bedison and Conception Junction, in addition to the one mentioned in the last number of the Journal. His elvtr. at Conception Junction was destroyed by fire in March, 1922. Mr. Kirby then went to Paola and managed the Farmers Elvtr. Co.'s elvtr. there until it was sold.

KENTUCKY

Greenwood, Ky.—Windstorm blew four feet off its foundation the 60,000-bu. elvtr. owned by the Larmon Mlg. Co. a few weeks back.

LOUISIANA

New Orleans, La.—Bert Hogan is now associated with J. S. Waterman & Co.

New Orleans, La.—After a severe fall on the cement yard at his home, George Pleasants of the grain firm of J. V. Ferguson & Co. died Christmas week. Mr. Pleasants has for many years been engaged in the grain business. His widow and a son survive.

MARYLAND

Baltimore, Md.—The Baltimore Chamber of Commerce will hold its 70th annual meeting of members Jan. 26.

Baltimore, Md.—William M. Chelf, licensed grain inspector of the Chamber of Commerce, will become grain sampler at Philadelphia in the Bureau of Agricultural Economics.

MICHIGAN

Alpena, Mich.—A defective chimney in the C. M. Davis Mill caused a loss recently.

Lincoln, Mich.—I have succeeded J. R. Martin as mgr. of the Lincoln Elvtr. Co.—G. C. Haskell.

Hemans, Mich.—Mail addressed to the Hemans Grain Co. has been returned marked "Unclaimed."

Mulliken, Mich.—A defective flue in the McNaughton & Peabody Elvtr. resulted in a slight loss on Dec. 22.

Battle Creek, Mich.—A \$75,000 four-story concrete and wood grain warehouse is being built at the Kellogg plant.

Harbor Beach, Mich.—Gilmore E. Scranton, 63, for 12 years general manager of the Huron Mlg. Co. here, died just before New Year's Day.

Howell, Mich.—The Livingston Co-op. Ass'n, owning the Howell City Mills, has incorporated for \$50,000 and become a profit-sharing organization.

Port Huron, Mich.—Hay Bros. of Listowel, Ont., Canada, have bought in the 500,000 bus. of salvaged American oats from the recent fire in the Grand Trunk Elvtr.

Blissfield, Mich.—We tore down the building from which the machinery was sold to Karner Bros. of Dundee.—Henry D. Phillips, sec'y, Farmers Co-op. Grain & Produce Co.

Byron, Mich.—The office of the Central Elvtr. Co. was burglarized early on a recent morning. The door was forced, however the raid was unprofitable. The same gang is supposed to have also looted another grain elvtr. office at Bancroft, this time getting \$10 for their efforts. A tag tied to the safe door notifying the intruders that it would not be necessary to blow the safe door to gain access probably saved the safe from demolition.

Port Huron, Mich.—John D. Menish, president of the Grand Trunk Elvtr. Co., states that no decision has been reached regarding the future of the company. Until the work of salvaging has been completed and some accurate idea of the loss suffered determined, the directors and officers will await making any decisions. The salvaged grain was wet and full of charred wood, more water being added each of the numerous times the fire department was called to extinguish some minor flame that burst from the smoldering depths with seeming regularity.

Allegan, Mich.—The Allegan Mlg. Co.'s "Upper Mill A" has been turned over to the Allegan Farmers Co-op. Ass'n. The final terms of the sale were agreed upon in time to permit the latter to take possession the Monday before Christmas. Necessary repairs, changes, etc., are being made. A large feed grinder is to be connected. The latter company will continue its other business, however, the stock from its warehouse has already been moved to the mill. The mill is to be equipped with flour machinery at a later date in addition to feed equipment now therein. (Mill "B" has also been sold. The new owners, Edw. Horan, Jr., and Wm. Legner, are continuing operation.)

St. Louis, Mich.—In addition to the new elvtr. erected here for Hart Bros. of Saginaw, two mills now aid previous handling facilities. Some 48 bean picking machines have been installed.

MINNESOTA

Belle Plaine, Minn.—Construction is scheduled to start Apr. 1 on a new corn flakes plant proposed to house the old Kiduff Cereal Mill.

Triumph, Minn.—The Matson Elvtr. that was sold to Hubbard & Palmer is located here rather than at Monterey.—G. C. Satter, mgr., Monterey Farmers Elvtr. Co., Monterey.

Albert Lea, Minn.—The Wedge Seed Co. did contemplate some additions, but understand they have let the matter rest. I am local superintendent of the Mills of Albert Lea.—F. S. Birkenmeyer.

St. Paul, Minn.—Receivers of the Equity Co-operative Exchange in a statement of Jan. 7 report that up to Nov. 30 there had been paid off secured and preferred claims amounting to \$607,500.13. As soon as other secured and preferred claims amounting to \$250,000 have been paid off payment will commence on general claims. The total claims filed were \$1,072,281, and the total assets available for liquidation of claims were \$1,530,791, so there is every prospect that eventually all of the unsecured and unadjudicated claims amounting to \$214,000 will be paid in full.

MINNEAPOLIS LETTER.

A new office suite is now being occupied by the William A. Poehler Co. in the old Chamber of Commerce.

Leonard S. Allen, a well known grain man and one of the partners in Chas. E. Lewis & Co., died here Jan. 4.

C. S. Sheffield spent part of Christmas week at home at least. He fractured a leg in Elevator "K" over a month ago.

Geo. W. Dicus, for several years editor of the Co-operative Manager and Farmer, after an illness of but a few days, died Dec. 26 at his home in St. Paul.

MISSOURI

Dalton, Mo.—The Farmers Elvtr. Co. is now managed by J. M. Mason of Salisbury.

Ozark, Mo.—The Ozark Elvtr. Co. has installed a new corn sheller and cleaner.

Marthasville, Mo.—W. T. Ingeles, mgr. of the local grain elvtr. owned by the Valier & Spies Mfg. Co. for the past 26 years, was found dead in his car near town Jan. 5. He died of heart trouble.

St. Louis, Mo.—A 40% increase in rent is the maximum raise received by some of the members of the St. Louis Merchants Exchange. The average is 17% additional. Dues have also increased 25% per annum, from \$100 to \$125.

Lee's Summit, Mo.—We have installed a Western Cleaner and also a Western Sheller in our elvtr. here, giving us a shelling capacity of from 400 to 600 bus. per hour. We use electric power exclusively.—E. Reed, Lee's Summit Elvtr. & Grain Co.

Butler, Mo.—An electric motor has been installed in the Butler Roller Mills to replace the steam engine heretofore used. The plant is being overhauled. Full particulars regarding the reopening of the mills appeared in the Dec. 10 number of the Journal.

Carthage, Mo.—An additional 300,000-bu. elvtr. capacity will be built this spring for the McDaniel Mfg. Co. The present concrete elvtr. has 250,000 bus. capacity. The same head-house will serve the additional elvtr. The estimated cost of this expansion is close to \$100,000. The company has been forced to use an old wooden house for increased storage space. The elvtr. is a public warehouse under state supervision.

Paris, Mo.—The stockholders of the Producers Elvtr. Co. assessed themselves 40% to reopen quarters as soon as possible. Their plant burned at a loss of \$10,500 recently.

Atlanta, Mo.—We are now remodeling the elvtr., feed mill and warehouse of the Atlanta Elvtr. Co. taken over from the bank by ourselves and will install some new machinery and scales. A hammer mill and a feed grinder will be among the new equipment. The roof of the warehouse will be recovered; the hay, tankage house, cribs and coal sheds will be overhauled and some remodeling done on the elvtr. The plant will be placed in tip-top running order thruout.—J. D. McClean & Co.

St. Louis, Mo.—The president of the Merchants Exchange for the ensuing year is Woodson K. Woods. Mr. Woods was nominated for this position at the annual caucus and had no running opponent. George C. Martin, Jr., head of the Martin & Knowlton Grain Co., and formerly head of the firm's predecessor, Goffe & Carkener Co., president of the Grain Club and twice second vice-president of the Merchants Exchange, is slated for the first vice-presidency at the next election. Charles E. Valier has the nomination for second vice-president. Four directors were chosen from the following five nominees: Will J. Klosterman, T. Maurice Scott, Wm. T. Brookings, Louis T. Hall and Herman A. Von Rump. Samuel Plant, the retiring president, will fill the fifth vacancy in the board of directors.

KANSAS CITY LETTER

J. D. Tinklepaugh married Miss Grace Allen Christmas week. He is mgr. for the Grain Marketing Co.

Offices in the new Board of Trade Building have been opened by close to 90 grain firms, 17 mills, 3 grain inspection offices and many other allied industries. The last session in the old building was held Dec. 31.

E. O. Moffatt and Miss Bernhardina Himburg were married shortly before Christmas. Mr. Moffatt is the owner of the Moffatt Grain Co. They motored to New York from where they will sail for Palm Beach.

Roy Monier of Carrollton is slated for State Grain and Warehouse Commissioner of Missouri, according to reports received on the 7th of this month from Jefferson City. The position is now held by W. O. Keson, who has announced that he would not resign as requested by Governor Hyde. The department supervises the inspection and weighing of grain thruout the state.

The election of officers of the Kansas City Board of Trade Jan. 6 resulted in the following returns: Harry C. Gamage, pres. (the second youngest to head this exchange), succeeding Allen Logan. C. M. Hardenbergh is the new second vice-pres., succeeding L. A. Fuller, who automatically becomes first vice-pres. The new directors are Frank A. Theis, F. W. Lake, J. J. Kraettli, W. W. Marshall, J. S. Hart and E. M. Jolly. The new Arbitration Com'te consists of K. G. Irons, Paul D. Bartlett, E. C. Meservey, Jr., D. C. Bishop and R. H. Sturtevant. These new officers will be installed Jan. 13 at the regular meeting of the board. C. W. Lonsdale and E. O. Bragg were elected to serve two years and F. G. Crowell for one as directors of the Grain Clearing Company. These three succeed themselves and with the two "hold-over" directors, B. C. Moore and H. F. Spencer, choose their own officers.

ST. JOSEPH LETTER.

No memberships have been transferred on the Exchange here during the past year. Thirty-four firms are now represented.

Nominees to hold office during 1925 will be either W. M. Huff or C. L. Scholl as pres., to succeed R. E. Hastings; C. A. Geiger or S. A. Penney, to succeed the former as vice-pres. Nelson K. Thomas is sec'y and F. L. Ford is treas.

The Presto Feed Co. has been incorporated for \$2,000 to do a wholesale and retail grain and grain products business by C. F. Westcott, R. E. Moser, and A. J. Louch.

D. P. Moore, vice-pres. of the recently incorporated St. Joseph Mfg. Co., has been connected with the Marshall Hall Grain Co. but has transferred his representation on the St. Joseph Grain Exchange to the former and will represent them on the trading floor. The corn flour milling capacity of this concern is 500 bbls. daily, and 160 tons feed. Storage is at present 60,000 bus., with 40,000 bus. additional in process of construction. Further information has appeared in the past two issues of the Journal.

MONTANA

Dodson, Mont.—Ole J. Hendrickson of Glasgow has just become mgr. of the Imperial Elvtr. here.

Brady, Mont.—An overheated stove in the elvtr. of Frederick F. Lewis resulted in a small loss Dec. 22.

Belt, Mont.—John W. Hedrick succeeded A. D. Skinner as mgr. of the Belt Farmers Mills & Elvtr. Co. shortly before Christmas.

Moulton (Christina p. o.), Mont.—Fire totally destroyed the office and engine room of the Montana Elvtr. Co. and slightly damaged the elvtr. on Dec. 23.

Augusta, Mont.—The owner of the elvtr. moved here from Gilman is the Montana Central Elvtr. Co. It is closed for the season. There is no elvtr. at Gilman now.—X.

NEBRASKA

Richfield, Neb.—The Farmers Union Elvtr. Co. has been dissolved.

Lodge Pole, Neb.—The Lodge Pole Lumber & Grain Co. has been incorporated for \$200,000; George A. Roberts, Omaha.

Homer, Neb.—J. P. Graham has opened the Holmquist Grain Co.'s elvtr. as mgr. The house was closed during the past summer and fall.

Oakdale, Neb.—Fire totally destroyed the elvtr. and contents of the Torpin Grain Co. a short time ago. Loss fully covered with insurance.

Auburn, Neb.—The Auburn Seed Co. is covering its elvtr. with sheet iron. A new set of Fairbanks Scales for both wagon and truck is installed.

David City, Neb.—Mail addressed to L. E. Krajicek, new lessee of the Nye-Schneider-Jenks Co.'s elvtr. here, has been returned marked "Moved."

Albion, Neb.—As lessee of the Interstate Mill & Elvtr. Co.'s mill, I anticipate changing to feed milling. Will operate present elvtr.—Walter W. Wilcox.

Walthill, Neb.—I am still mgr. of the Farmers Elvtr. Co. and have been mgr. for them for the past five years. M. Z. Easton is mgr. of the Farmers Elvtr. Co. at Winnebago.

Indianola, Neb.—The Farmers Elvtr. & Feed Co., formerly known as the Indianola Equity Exchange, just suffered a \$1,000 loss from fire caused by faulty heating arrangements.

Harbine, Neb.—The Wright Leet Grain Co. of Lincoln is building a modern studded iron clad elvtr. to replace the one that burned there latter part of October. W. C. Bailey & Son have the contract.

Omaha, Neb.—The grain business formerly conducted by J. B. Adams at Galva and Schaller, Ia., with an interest in L. H. Adams & Co. at Lake City, Ia., was incorporated under the name of J. B. Adams Grain Co. on Jan. 1. The principal office will be maintained here. The officers are J. B. Adams, pres. and treas.; L. H. Adams, vice-pres.; and S. S. Adams, sec'y. Authorized capital stock, \$75,000, of which \$60,000 is paid up.—J. B. Adams, pres., J. B. Adams Grain Co.

Vinnabago, Neb.—M. Z. Easton succeeds W. Reinking as mgr. of the Farmers Elvtr. Co. Mr. Easton has held this position before. Reinking purchased the Highland Grain Co.'s elvtr. at Grand Island and left to operate elsewhere.

Johnstown, Neb.—A. B. Williams purchased the old Nye-Schneider-Jenks Co.'s elvtr., grain storage buildings and hog lots here. The former owners will continue in the lumber and mill business here. Mr. Williams, a former competitor of Nye-Schneider-Jenks Co., took possession this week.

NEW ENGLAND

Windsor, Conn.—The Farmers Grain & Supply Co. has bought the grain business and grist mill of Charles T. Lewis.—S.

Boston, Mass.—A new manufacturing building is well under way for the Albany Mfg. Co. The three-story brick and cement structure will cost \$100,000.—S.

Milton, Conn.—I. T. Dickinson has turned over to John Hubbard the grain business which has handled for many years. A. T. Guild, who runs the mill here for Mr. Hubbard, will manage the grain business.

Huntington, Mass.—H. C. Puffer of Huntington has bought the grain business conducted under the name of and owned by T. J. Conly. The wholesale and retail establishment was founded by H. J. Fiske.—S.

Nashua, N. H.—A 3½-story grain elvtr., known as the O. B. Tilton grain elvtr. though occupied by the Nashua Grain Elvtr. Co., was swept by fire New Year's night. Considerable grain and hay were stored within the uninsured property. Loss \$50,000 to \$75,000.

St. Albans, Vt.—The grain and feed business and real estate accompanying the business of late William Cunningham has been sold to J. McGovern, who has taken possession and will continue the business. Mr. McGovern was formerly in similar business in Cambridge and Richmond.—S.

Boston, Mass.—The new firm of Washburn, Hall & Bassett Co., Inc., has taken over the local branch of the C. P. Washburn Co. The new grain and flour firm came into being Jan. 1 and is composed of C. P. Washburn, president and treasurer of the C. P. Washburn Co., and two associates of long connection with the firm, namely, Eben A. Hall and Joseph A. Bassett. The C. P. Washburn Co. will continue its milling and other branches under the same management as before.

NEW YORK

Syracuse, N. Y.—The New York Hay & Grain Dealers Ass'n will hold its mid-winter meeting here Jan. 15.

New York City.—George H. Baston is associated with us as manager of our flour department.—Continental Grain Co.

Buffalo, N. Y.—Charles Kennedy, president of Charles Kennedy & Co., grain merchants, and vice-president of the United States Food Grain Council during the war, died at his home Dec. 24. He was very prominent in public as well as private circles.

Buffalo, N. Y.—Classes in grain grading have been opened by Willis B. Coombs, local federal grain supervisor, and Patrick D. Connors, chief grain inspector. Wheat, corn, oats, rye and grain sorghums are included on the program carried on within the halls of the Chamber of Commerce.

New York City.—The firm of Montgomery Jenkins was dissolved as of and on Dec. 31. The three members of the old firm, viz., A. Montgomery, Jr., John W. Seaman and Howard E. Norris have, with Robert F. Straub, formed Montgomery, Straub & Co. as of Jan. 1. The same offices will be maintained and the business in grain, cotton, cottonseed, stocks and bonds will be continued.

Buffalo, N. Y.—Preliminary work on the substructure for the \$1,000,000 elvtr. of the Saskatchewan Co-op. Grain Elvtr. Co. has begun. The cost of this phase of the work is to be \$250,000. It was reported in the Dec. 10 number that Barnett & Record Co. were awarded the contract.

Buffalo, N. Y.—Final negotiations for the sale of the Dakota elvtr. to Levi S. Chapman, chairman of the board of directors of local hardware jobbers, are understood to have been completed in time to permit the actual transfer of the properties on Jan. 1. The consideration is said to be \$2,000,000. The elvtr. is on an island of the Dakota Elvtr. Corp., of which Edward Michael, Buffalo, is pres. That the name of the elvtr. will remain the same, despite the fact that a new elvtr. will be erected on the site, has not been established. The present terminal has 1,200,000 bus. capacity, is of steel construction, is electrically operated, and handles 25,000,000 bus. annually.

New York City.—The nineteenth annual Christmas party of the Produce Exchange to 1,200 children of lower New York was given on the last afternoon of 1924. Every child received some gift he or she particularly craved, whether it be dolls, roller skates, toys or what-not, along with a generous sprinkling of candy, etc. Trick dogs, clowns, acrobats, tight-rope walkers, ponies, monkeys and in fact most all of Starrett's Circus were there to entertain the youngsters. Lieut. L. Mansfield Matt and his 106th Infantry Band kept harmony above the shrieks of joy. F. A. Colby was Santa Claus. Under the direction of Walter Moore as manager of the entertainment, the affair was delightfully successful.

NORTH DAKOTA

Minot, N. D.—A modern corn drying plant is now in operation for Valke, Christensen Co.

Chasely, N. D.—C. L. Curry will manage the elvtr. just purchased here by his brother E. S. Curry of New England.

Bismarck, N. D.—The North Dakota Farmers Grain Dealers Ass'n will hold its annual convention here March 25 to 27.

Burt, N. D.—S. H. Bohnecht is mgr. of the new elvtr. built here for J. S. Birdsall of New Leipsig, N. D.—Sims & Bohnecht.

Mott, N. D.—A wall in the engine room caught fire from an overly warm stove in the elvtr. of the Mott Equity Exchange on Dec. 23.

McVile, N. D.—An overheated stove is blamed for the flame that totally destroyed the office of the M. F. Swanston Elvtr. Co. Dec. 29.

Leal, N. D.—We expect to rebuild our elvtr. next summer unless there is a crop failure.—N. P. Nelson, mgr., Osborne McMillan Elvtr. Co. (The fire that destroyed this house was reported in the Dec. 10 number of the Journal.)

Grand Forks, N. D.—Political interference is attributed as the cause for the resignation of practically all of the members of the board of managers of the State Mill & Elvtr. here. C. E. Austin, the active head of the organization, is among those withdrawing. C. S. Jackson followed suit.

OHIO

Sabina, O.—We still operate under the name of W. D. Rapp & Son.—W. D. R.

Arcanum, O.—Mail addressed to Chas. L. Ballinger, manager of the Arcanum Elvtr. Co., has been returned marked "Unclaimed."

Hoytville, O.—Our office was robbed again within eleven days after the first invasion. An adding machine was taken the last time.—Eagle Grain Co.

Woodville, O.—The Luckey Farmers Elvtr. Co. is installing a 24-in. Motor Driven Bauer Attrition Mill in its new elvtr. here. J. M. Bell is overseeing the installation.

Celina, O.—Palmer & Miller Grain Co. is replacing its Single Disc Mill with a new 24-in. Motor Driven Bauer Attrition Mill. J. M. Bell is superintending the alterations.

Norwalk, O.—Dr. Phil H. Fulstow has acquired the entire interests of Ralph W. Mead, senior partner of the firm of Mead & Woodward, operating elvtrs. here, at Hartland, Clarksfield and Collins. The new firm will be known as Woodward & Fulstow.

Toledo, O.—Fire for the fifth time within six years destroyed the Raymond P. Lipe Co.'s wholesale grain sheds, burning thousands of bales of hay. The loss is placed at \$12,000. In all probability this site will not be used for the new warehouse which the company intends to build.

Cincinnati, O.—Vinton Perin was declared insane and committed to the Lima State Hospital for the Criminal Insane by Judge Wm. H. Lueders, whose ruling was contrary to all precedent here. The Hamilton County alienists, however, declared him "now sane and always so." Mr. Perin was acquitted by a jury in criminal court of the murder of his mother-in-law on the sole ground of insanity. He was vice pres. of the Perin Mills.

Toledo, O.—The Toledo Produce Exchange at its annual election Jan. 5 chose J. D. Hurlbut as president; J. C. Husted, first vice-president; J. Wickenhiser, second vice-president; A. Gassaway, sec., and F. W. Jaeger, treas. The following were elected as directors: L. J. Schuster, F. O. Paddock, F. R. Moorman, K. D. Keilholtz, W. A. Boardman, H. R. DeVore, C. W. Mollett, H. W. Applegate, H. Anderson and E. A. Nettleton. The arbitration committee is composed of C. S. Coup, L. A. Mennel, J. W. Luscombe, Jr., G. D. Goodman, Henry Hirsch, G. C. Eicher and Frank C. Bowes. The following were chosen to serve on the com'te on appeals: O. H. Paddock, S. L. Rice, R. L. Burge, Harry Hirsch, P. M. Barnes, G. A. Kragloh, W. E. Stone, J. A. Streicher, C. E. Patterson, H. O. Barnhouse and C. R. Keilholtz.

OKLAHOMA

Drummond, Okla.—Windstorm slightly damaged the elvtr. of the Enid Mfg. Co. this fall, but the damage has been repaired.

Lahoma, Okla.—W. B. Johnson will probably remodel his house this Spring.—C. V. Schneider, mgr., E. R. Humphrey Grain Co.

Grove, Okla.—W. W. Jarnagin will start the erection of a flour mill this month. The wholesale feed dealer recently purchased the Ross elvtr. and feed mill here.

Turpin, Okla.—The Farmers Grain & Elvtr. Co. has been incorporated for \$10,000 by Frank Hardin of this point, and Garland White of the White Grain Co. of Oklahoma City.—P. J. P.

Sentinel, Okla.—It is understood that D. J. Reiter, who recently purchased the properties originally owned by W. H. Titas—the Orient Elvtr., intends to rebuild.—Farmers Co-op. Ass'n.

Drummond, Okla.—Cloyd Black, who has been managing the Blackwell Mill & Elvtr. Co., closed up the elvtr. for a few months and has left for Mt. Hope, Kan., to re-engage in the banking business.

Lindsay, Okla.—Will Conner was painfully injured while working at the elvtr. of the Lindsay Grain & Elvtr. Co. last month when his left arm became caught under a belt and drawn around the pulley. His arm was cut and bruised, but not permanently disabled.

El Reno, Okla.—Work on the reinforced concrete storage bins, nine store tempering bins, and cleaning house to be built for the El Reno Mills & Elvtr. Co. by the Jones-Hettelsater Construction Co., will begin as soon as the weather permits. The additions are to be completed by June 15, 1925. (Further information appeared in the last number of the Journal.)

Mounds, Okla.—Railroad train sparks caused the flame that completely burned a frame 18x30 warehouse and a 70x30 shed belonging to the R. L. Barton Mill & Elevator Co. at 3 o'clock on a recent morning. The buildings were full of broom corn, alfalfa, and prairie hay. A strong wind alone saved the firm's elevator and cotton gin from catching afire. Some \$2,000 insurance covered the \$4,000 loss.

Edmond, Okla.—A completely equipped, modern, reinforced concrete elevator with storage capacity of 100,000 bus. is to be built for the Eagle Mill Co. Contract has been closed with the Jones-Hettelsater Construction Co. and work will commence shortly in order to finish by June 25. Facilities for receiving from wagon, truck, and from cars on track will be incorporated in the structure. A 2,000-bu. hopper scale is included in the equipment to be installed.

OREGON

Silverton, Ore.—The W. E. Loughmiller Feed & Flour Mill has been improved with a number of new additions.

Portland, Ore.—The Sperry Flour Co., which operates a large number of grain elevators and grain warehouses, changed the name of the Portland Flour Mills Co., a subsidiary though independently operated, to that of the parent company. The Portland Flouring Mills Co. was purchased by the Sperry Flour Co. over two years ago and it was at that time decided to use the local name. The present change was made Jan. 1 to avoid confusion in marketing.

PENNSYLVANIA

Great Bend, Pa.—At a loss of \$10,000, the Puryear grain warehouse burned Dec. 27.

Philadelphia, Pa.—Following two days' illness George G. Omerly, 58, president of the Hancock Grain Co., one of the best known exporters on the Atlantic Coast and an authority on export business, died of heart failure in the Pennsylvania Hospital here Dec. 19. Mr. Omerly was Philadelphia manager of the Grain Export Commission of the Allied Governments during the World War, having had charge of all export grain and foodstuffs that passed thru this port at that time. The British Government rewarded his services at the close of the war with a royal testimonial. At the age of 15 Mr. Omerly started work in the employ of the Hancock Grain Co. as an office boy. He is survived by his widow, two daughters and a son.

SOUTH DAKOTA

Redfield, S. D.—Will install a new scale and truck dump in the elevator next spring.—H. W. Speight.

Ward, S. D.—The Farmers Elevator Co.'s elevator burned and the company has been dissolved.—H. A. Duncan, sec'y.

Belle Fourche, S. D.—H. Quarnberg was in the Clarkson Hospital at Omaha over the holidays being treated for sinus. He is the proprietor of the Tri-State Mill Co. here.

SOUTHEAST

Laurinburg, N. C.—The Norman Power & Mill Co. has been incorporated to operate a grist mill and cotton gin and to deal in flour, with a capital stock of \$125,000.

TENNESSEE

Knoxville, Tenn.—The Security Mills is the new corporate name of the Security Mill & Feed Co.

Nashville, Tenn.—F. M. Carter of the F. M. Carter Grain Co. was severely injured in an automobile accident New Year's week.

Gordonsville, Tenn.—The warehouses of the Smith Feed & Grain Co. and the Gordonsville Mill Co. were destroyed by fire on Christmas day. The Gordonsville Mill Co. lost its sheller house also.

Memphis, Tenn.—Ben H. Williamson, long prominently identified with the grain brokerage business of Ben H. Williamson & Co., died of uremia on his 65th birthday. He had been ill since last spring and suffered a collapse two weeks ago. He never rallied and his death had been expected for several days.

Memphis, Tenn.—Walter M. Browne is now president of the Memphis Hay & Grain Ass'n, having been chosen as such at the annual election and banquet held Dec. 20. Mr. Browne succeeds Charles S. Kenney in this new capacity. John M. Trenholm succeeds Mr. Browne as vice president. Walter J. Fransioli was re-elected sec'y-treas. The directors include L. P. Cook, C. Y. Robinson, S. E. Rison and E. W. Sommer.

Nashville, Tenn.—The name of the Nashville Warehouse & Elevator Co. has been changed to the Nashville Warehouse & Elevator Corporation by new interests, capitalized at \$151,000, with 1,500 shares of non-par value. Some \$50,000 will be expended on modern elevator equipment to be placed in the corporations' 500,000 bu. elevator and 250,000 bu. warehouse, the largest in the South. The incorporators are: S. M. Allen, Jr.; Joe W. Scales, Paul M. Davis, P. D. Houston and V. J. Witherspoon. The first-mentioned will be president, while Mr. Scales will become general mgr. of the corporation.

Memphis, Tenn.—Candidates for offices in the Memphis Merchants Exchange were voted upon at the 43rd annual election Jan. 10. The full list of candidates is: President, S. F. Clark and L. P. Cook; vice president, T. B. Jones and J. J. Wade, Sr.; directors (eight to be selected), W. R. Smith-Vaniz, S. E. Rison, S. T. Pease, C. S. Kenney, E. W. Sommer, W. P. Brown, V. L. Rogers, Walter M. Browne, E. E. Anderson, J. M. Trenholm, L. B. Lovitt, W. P. Battle, J. T. Russell, W. A. Hall and J. B. Edgar. The entertainment committee arranged for a musical program by Joe Bennett's Moonlight Syncopators. Following the election, the annual meeting of the membership was conducted, at which time the officers' reports were presented and election results announced. A buffet lunch was served during polling hours. Walter J. Fransioli is Sec'y of the Exchange.—J. J. P.

TEXAS

Spearman, Tex.—The Nighswonger Grain Elevator is closed for the season.

McKinney, Tex.—A 75x125 foot brick addition is to be built for the Collin County Mill & Elevator Co., with half-basement. The improvement is to cost \$25,000.

Lockney, Tex.—Gilbert Bean will not be connected with the new firm of Townsend Grain Co., recent purchasers of the Leslie Floyd Grain Co.'s elevator, which sale was reported in the last number of the Journal.

Sherman, Tex.—The son of the late G. B. R. Smith, J. Paul Smith, has been chosen president of the G. B. R. Smith Mill Co., succeeding his father in that capacity. Mrs. Nancy Smith is vice-president and a member of the board of directors.

Fort Worth, Tex.—Amarillo and Plainview are now included in the Fort Worth district of the Federal Grain Supervision. In the past these aforementioned cities have been in the Oklahoma City district. Grain going from Amarillo and Plainview in the direction of or to Fort Worth required the sending of samples from cars inspected by the supervision department there to Fort Worth, when inspection could be more conveniently and quickly handled here. Duplication of effort has now been eliminated.—H. B. Dorsey, sec'y, Texas Grain Dealers Ass'n.

WASHINGTON

Mt. Vernon, Wash.—Wm. Hayton has purchased the interest of Guy Clark in the City Grain & Seed Co.

Everett, Wash.—A \$5,000 grain elevator is being built for the Washington Co-op. Egg & Poultry Ass'n. It will have a capacity of 600 tons of feed.

WISCONSIN

Oshkosh, Wis.—A new elevator is being built here by the Leach Co.

Coloma, Wis.—Fire destroyed the warehouse of the A. M. Penney Co. on Dec. 21.

Appleton, Wis.—No one is operating the Appleton Cereal Mill's elevator here.—Ed. Kuck.

Coleman, Wis.—M. Martens has erected a new brick warehouse for storing feed and flour.

Hazel Green, Wis.—Fire destroyed the Splinter Feed Mill; loss \$4,000. It will be rebuilt at once.

Sun Prairie, Wis.—There has been no fire here. We have changed the name of our company from Chase & Son to Chase Lbr. & Feed Co.—C.

Elkhart Lake, Wis.—Louis Laun, 59, prominent grain man here and in the state, died Christmas day at his home. He built an elevator and conducted the Elkhart Lake Grain Co.

Clinton, Wis.—Valuable machinery was destroyed by fire and water when the buildings, stock, etc., of the Associated Farmers caught ablaze Dec. 27, causing a \$20,000 loss in insurance \$7,500. A few loaded cars were saved. The elevator was purchased from the Milwaukee Elevator Co. over four years ago.

MILWAUKEE LETTER.

Milwaukee, Wis.—Fire destroyed the S. Makowski Flour & Feed Mill; loss \$25,000.

Milwaukee, Wis.—Frank J. Phelan, member of the Milwaukee Chamber of Commerce, has incorporated the F. J. Phelan Co. with a capital stock of \$10,000, to deal in grain, etc. E. Phelan and S. Eggelston are the others interested.

Milwaukee, Wis.—W. A. Hottensen, who has been the active vice-president for the past three or four years of the W. M. Bell Co., will continue in charge of the affairs of that company, assisted by the other associates of the late president and founder, Wallace M. Bell. The business will be executed along precisely the same lines as it has heretofore been governed.

Milwaukee, Wis.—"Bulls and bears" of the Milwaukee Chamber of Commerce threw their business cares of 1924 to the winds on the last afternoon of December. An annual New Year's frolic was held on the Exchange floor to the tune of a five-piece negro orchestra for some 250 grain shippers, commission merchants and millers. Any sharp rise or decline in market quotations were treated with complete disdain. Matt Kleiser was chairman of the event. Others in charge of arrangements were Hugo Stolley, vice-pres.; H. A. Plumb, sec'y; A. L. Flannigan and A. L. Johnstone, directors.

A number of suits have been filed in Flathead County, Montana, by the Montana Wheat Growers Ass'n in an attempt to enforce the growers to live up to their pooling contracts. The farmers are unable to see how the pool is proving beneficial to them and a good many are level-headed thinkers.

A proposal to reorganize the Federal Trade Commission so it will become an advisory body to assist business in the elimination of unfair trade practices regarded as harmful, as was originally intended when created by Congress, is under consideration by President Coolidge. His plan will necessarily require congressional amendment to the Act. Little opposition, however, is anticipated. Why not repeal the law and send the commissioners to Russia?

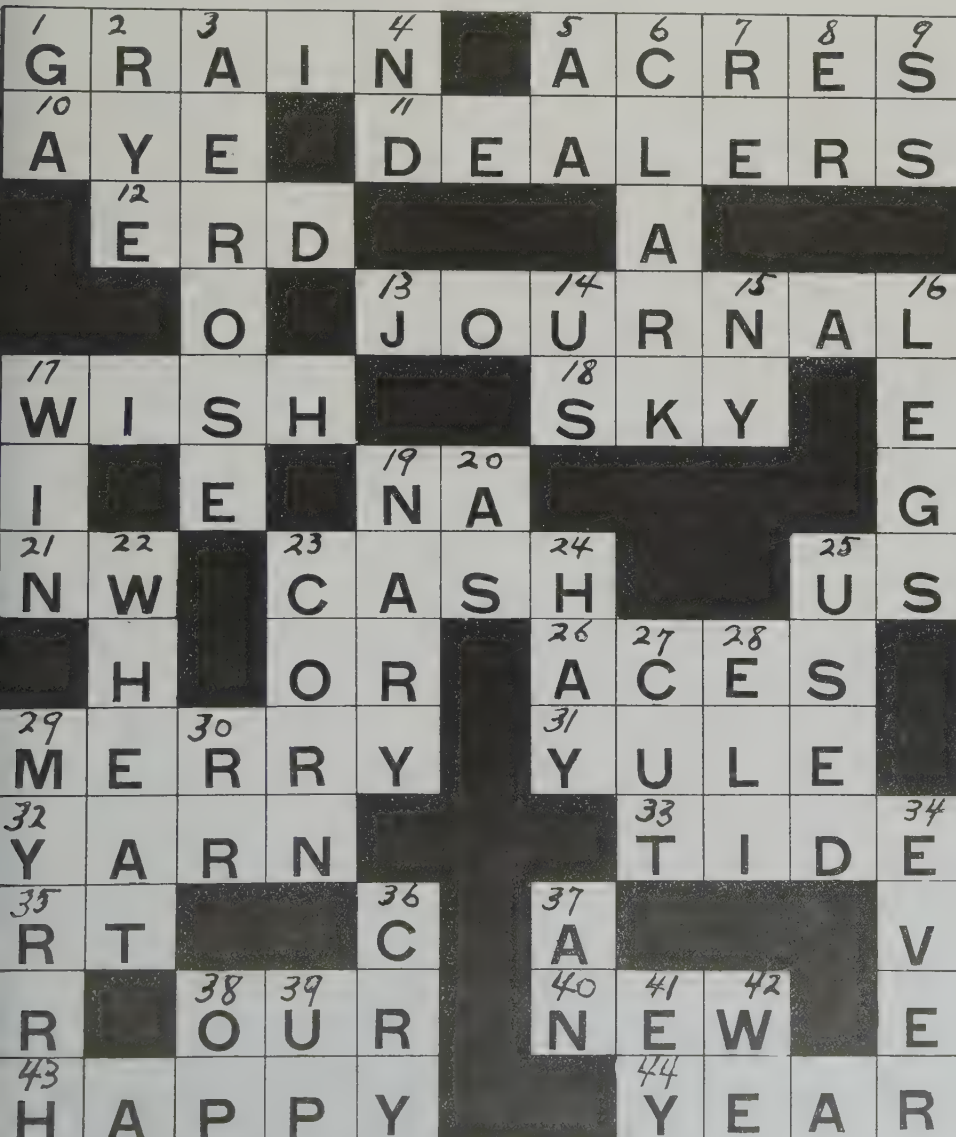
Solution of the Grain Dealers' Puzzle.

We have not been advised of any of our readers having been sent to the nearest sanitarium as the result of their vain attempts to solve the crossword puzzle in the Christmas number of the Journal. However, we are fully aware that there are a great many readers who have not solved the puzzle correctly. Its correct solution is given herewith. The only readers who have succeeded in a correct solution of the puzzle named in order their replies were received are: M. Coffey, traveling representative of E. P. Con & Co., Watertown, S. D.; Miss H. M. Inners of the Corn Products Refining Co., Chicago, J. W. Carr of Taft & Carr Co., Portland, Ore., and L. A. Root of Los Angeles, Cal. It had been our fixed purpose to give the prize to the first one solving the puzzle, but before going to press the Postoffice department issued an arbitrary ruling that no prizes could be offered or given by publications passing through the U. S. mail, because the winning of the prizes is largely a matter of chance, dependent upon the delivery of the replies by the Postoffice department. This may be gaming, but we doubt it. Of course our great hearty-loving American people delight in having their life and conduct supervised and regulated by a lot of Washington bureaucrats.

Forty-four cents of every dollar expended in retail in the United States goes for food, 10 cents for clothing and 10 cents to the automobile industry.

Market grains on bulges: Don't try to guess the top. Don't overtrade in wheat at present levels. It is always better to be safe than sorry. World's shortage in wheat still has to be proven. Wheat selling at \$1.00 a bushel and wheat at \$1.75 are entirely different. We have 95,000,000 bus. in our visible. Export demand for our wheat is quiet. Market advanced on talk of large sales flour to Russia. For three months we face severe competition from Argentina, Australia and India. Six weeks ago we had sold more than our surplus of rye for export. Still when navigation closed more than 5,000,000 bus. were held at the head of the lakes. Interior dealers cannot sell rye export. Chicago December rye expired at 10½ cents under May. No shortage with that difference. Bear in mind that at this level of prices, when it becomes apparent we are going to carry over a fair amount of wheat, values can fade away rapidly.—C. A. King & Co.

Rock Island, Ida.—Wheat used by the Idaho Breakfast Food Co. in its wholesale plant here, which is managed by David Seaton, is extraordinarily hard. It was originally found in an old Mexican tomb, in which a sufficient supply was found to develop enough to be used in the manufacture of foodstuffs. It is impossible to make bread flour from this grain due to its hardness. Horrible! The legislature should enact laws to soften this hard product of the state.



Solution of the Cross Word Puzzle which appeared in the Journal for Dec. 25, 1924.

Reduces Tolls Avoids Expensive Inaccuracies

Pope & Eckhardt Co., prominent Chicago Grain Commission Merchants, commend the Universal Grain Code. This company has used this Toll Saver continuously since its publication. Read the convictions of a user:

Chicago, Dec. 19, 1924.

Grain Dealers Journal,
Chicago, Ill.

Gentlemen:

We have used the UNIVERSAL GRAIN CODE extensively since this book was available to the Trade some years ago. We find it is a Code that can be used much more freely in expressing desired information on orders, purchases, sales, prices and other intimate matters involved in the Grain Trade; therefore, that it demonstrates without further explanation, a saving in cost which we consider a most important item. It is sure that with a much larger number of words, that can be used to give expression to what is desired to communicate with our country patrons that it offers occasionally a few more difficulties to prepare a message, but that is quickly overcome with increased familiarity with the book.

We have found that our customers also use this book extensively and find it convenient and profitable, even if for no other purpose than saving of telegraphic tolls.

We consider it a most useful and desirable book for use in the Grain Trade and the various interests related thereto.

Very truly yours,

POPE & ECKHARDT CO.

EAD-B

When such companies as this place so strong an endorsement on any code, it is conclusive proof that it possesses real merit.

Follow the example of the Pope & Eckhardt Co. and its customers; stop the leaks in your business by using an accurate, toll saving, grain, feed and seeds code.

Printed on rice bond paper, 146 pages, substantially bound in flexible leather, size 7x4½ inches, weight 5 ozs. Price, f. o. b. Chicago, \$3.00. Book paper, board covers, \$1.50.

Grain Dealers Journal
309 So. La Salle St. Chicago, Ill.

Grain Carriers

An embargo on rail shipments of grain thru the port of Baltimore was placed by the Pennsylvania on Jan. 8, due to heavy accumulations at that city.

Grain and grain products were loaded in 52,651 cars during the week ending Dec. 13, an increase of 1,981 cars over the corresponding week in 1923, reports the American Railway Ass'n.

Ogdensburg, N. Y.—Fire badly damaged the wooden freighter Charles S. Horn, of Cleveland, which docked here Nov. 19 with 36,000 bus. of wheat from Buffalo. An overheated stove in the galley was the cause.

New Orleans, La.—A severe fog in the harbor caused the S. S. Mont Agel, loaded with grain and miscellaneous cargo, to be rammed by the tank ship W. L. Steed. S. S. Mont Agel is now in dry dock for extensive repairs.

Midland, Ont.—The heavy grain season has led to 41 grain freighters being tied up here. Over 46,500,000 bus. of grain were handled during the season. About 10,000,000 bus. remain to be shipped before another season opens.

Cairo, Ill.—Grain barge towing down the Mississippi river to New Orleans has been entered into by the West Kentucky Coal Co. The towboat Charles F. Richardson is scheduled for the first trip, to take a cargo of 4,000 tons of wheat.

Steamship companies instituting the test case to recover damages for delays to steamers during the grain congestion at Buffalo, N. Y., in 1922, found their cases thrown out of court as no cause for action. Over \$400,000 is involved in the litigation.

Average daily shortage for the period ending Dec. 15 was 172 box cars, 45 coal cars, 269 all-freight cars, says the American Railway Ass'n. The surplus of serviceable equipment for the same period was 86,705 box cars, 100,793 coal cars, 223,431 all-freight cars.

Barges carrying 100,000 bus. of flaxseed, consigned by Spencer Kellogg & Sons, Buffalo, N. Y., from their elevator to New York City, were caught in the ice on the barge canal at Macedon. The barges suffered considerable damage before they were able to return to Buffalo.

The Erie canal closed too late in the season. Ice formed at the eastern end early, which caused a cargo of wheat and one of flaxseed to be sunk at Brewerton, west of Oneida Lake. Both promise to be total losses. Two cargoes of flaxseed managed to put about and return safely to Buffalo.

Surveying crews have been laying out two new branches for the Atchison, Topeka & Santa Fe railroad that will open a large grain section in Baca county, Kansas, which is as large as 4 ordinary Kansas counties. Farmers located there now have to haul their grain from 40 to 60 miles in order to reach a market.

Congestion at eastern lake ports this fall caused considerably delay to many unloading boats. In these cases the vessel owners want demurrage, which the grain shippers are unwilling to pay, the delay being unforeseen and unavoidable on their part. Boat owners who failed in their first demurrage suits are upholding the clean B/L.

Returns filed for the first 11 months of 1924 indicate that car loadings fell off about 3% from 1923. Total cars loaded from Jan. 1 to Nov. 29 were 45,055,554, compared with 46,505,554 during the same period in 1923. A new high weekly record was estab-

lished during the 7 days ending with Oct. 24, when 1,112,345 cars were handled.

The 42,000-bu. cargo of wheat carried by the steamer William H. Daniels, when it grounded in the Buffalo harbor Dec. 6, was sold at the office of Holmes, Browning & Co., Buffalo, on Dec. 29. Damage to the cargo amounted to \$30,000, it was stated. Shipment was made by the Canadian Co-operative Wheat Producers, Ltd., Winnipeg.

Increased costs of maintenance and operation of ships has led steamship officials to discuss the advisability of raising rates when the existing tariffs expire. In most cases present rates have only 3 to 6 months to run. In numerous instances fuel oil has increased the cost of operation from 10 to 40 per cent, depending upon the type of vessel.

Freight cars will be marked with load limit weights as well as the present nominal capacity as rapidly as possible since the general com'te, transportation division, of the American Railway Ass'n has approved the recommendation of the mechanical division regarding such markings. Heavier loadings of freight equipment is hoped to be thus effected.

Members of the New York Produce Exchange, Board of Trade, and Merchants Ass'n have had their ire raised by the declaration of Col. Frederick S. Greene, New York state superintendent of public works, that the New York barge canal between Buffalo and Syracuse is a failure and ought to be junked. They are conferring over ways and means of combating the idea.

Proposed revision of rates on grain by-products, including animal, poultry and pigeon feeds, to C. F. A. and Eastern territory and relisting of grain products and by-products in an attempt to consolidate them as much as possible, will be heard on Jan. 13, at 10 a. m., in the Transportation Building, Chicago, announces R. M. Field, traffic manager for the American Feed Manufacturers Ass'n.

International maritime regulations require ships entering port to have all rats on board destroyed. Ship owners have been protesting this, declaring comparison of the number of rats killed with the amount of money spent shows the cost of each rat killed to be \$2,000. A ruinous sum. Ship owners will ask the League of Nations Commission on Transit & Communications to change the regulations at its next meeting.

The country is about to witness a most astonishing example of Indian giving. Congress conferred authority upon the Interstate Commerce Commission to do a great many things, among them exercise discretionary power with respect to long and short hauls, and now the Gooding bill proposes to take away many of them.—Chas. Dillon, chairman, Western Railways Com'te, addressing Manufacturers Ass'n.

St. Louis, Mo.—St. Joseph, Kansas City and other grain interests from Missouri River cities are opposing a 15% increase in grain rates from Northern Kansas and southern Nebraska to Mississippi Valley points, declaring it will divert grain from Kansas and Nebraska sections to the lower Missouri River grain centers. The Interstate Commerce Commission conducted hearings on the case last week.—PJP.

Detroit, Mich.—Steamer F. B. Squire, of the Jenkins fleet, the last grain boat of the season, cleared from Fort William, Ont., on Dec. 18 with a cargo of grain for Buffalo. In Lake St. Clair ice was encountered and the steamer held fast in an 8-inch ice field for several days. A tug, Abner C. Harding, and the ferry Essex finally broke a passage and took the grain freighter into Detroit where she tied up at a coal dock, giving up the attempt to reach Buffalo this season.

An amendment to Texas Lines tariff No. 32-E, effective not later than Dec. 31, 1924, says, "If a car has been placed for unloading at original billed destination and is re-forwarded therefrom, without being unloaded, to a point outside of the switching limits, it will be subject to the published rates to and from the point of reconsignment, without reconsignment charge." This should save Texas shippers considerable.

Salt Lake City, Utah.—Hearing on the complaint of the Ogden Grain Exchange involving the reasonableness of rates on grain and grain products from Utah and Idaho points to eastern destinations has been completed. It consists of 846 pages and 92 exhibits were introduced. Briefs are due Jan. 31. Briefs on the westbound case, also instituted by the Ogden Grain Exchange, are due Feb. 15.

Loadings of revenue freight for the first 3 months of 1925 are expected to eclipse all other records for similar periods, says the report of the car service division of the American Railway Ass'n. The estimate is based on reports of commodity com'tes of various shippers' regional advisory boards regarding prospective business for that period compared with the same period of 1923 and 1924. Factors directly relating to car loading are also given consideration.

New Orleans, La.—The largest cargo of wheat ever taken from a Gulf port left New Orleans on the morning of Jan. 7, carried by the Dutch steamship Tjibesar bound for Rotterdam, Holland. The cargo consisted of approximately 504,000 bus. of No. 1 and No. 2 hard wheat, furnished by Norris & Co. thru its New Orleans representative, Edward Nathan. The next largest cargo to ever leave a Gulf port was carried by the same vessel from Galveston, Tex., some time ago, consisting of 496,000 bus.

The Illinois Central R. R. has purchased long time leases on the Alabama & Vicksburg and the Vicksburg, Shreveport & Pacific roads which practically amounts to a consolidation. These connecting lines extend across Mississippi and Louisiana, a total of 330 miles, the connections being made at Jackson and Vicksburg, Miss. Thereby Illinois Central service is greatly facilitated and connections with other roads permit improvement of service. Until recently the A. & V. and V. S. & P. were owned by British interests.

Consensus of opinion of the presidents of railways thruout the country, as reported in the Railway Age, shows that consolidation of lines is often advantageous and should be encouraged by the government, but not made compulsory. Taking the viewpoint of efficient management, all lines should be combined into a small number of huge systems. The further opinions of these presidents unanimously agrees that railroads should be left out of politics and enabled to earn a fair return without constant interference from Congressional activity.

Acting on behalf of the Pacific Traders Steamship Corp., a corporation to be organized in California, James Rolph, Jr., Mayor of San Francisco, has purchased the shipping services now maintained from the Pacific Coast to Australia and New Zealand and to the East Coast of South America. Careful consideration by the Shipping Board ended in its approval of the sale of 5 vessels of the 8,800-ton type, to be selected by the purchaser and used in the service to the East Coast of South America, with a guarantee of at least 12 sailings per annum, and of 4 vessels in the Australia and New Zealand service, with a guarantee of at least 10 sailings per annum, for a period of 5 years. Terms of the sale call for 25% cash on delivery of the vessels, the balance in 10 equal annual installments, with interest at 4¼%, secured by preferred mortgage.

The Illinois Central will be permitted to construct a 169 mile railroad in Illinois and Kentucky, but not to operate and finance the line, decided Judge Charles M. Foell, of the Superior Court, in an injunction suit brought by a group of individual citizens of southern Illinois communities on the main line between Edgewood and Cairo, Ill., to prevent construction of the \$17,000,000 cutoff. The Interstate Commerce Commission recently ruled against the citizens by granting the Illinois Central railroad permission to build the line. Its construction will open up that section of southern Illinois between Edgewood and Metropolis which is at present without railroad service and which has tremendous possibilities for farming and coal mining. The new line will begin at Edgewood and cross the Ohio river at Metropolis. Final hearing in the injunction suit will doubtless have to be heard in the Supreme Court.

Mississippi Attempts to Lower Grain Rates.

Rates on grain and grain products, in carloads, from interior points in Texas, Oklahoma, Kansas, Nebraska, Colorado, Iowa, Minnesota, Indiana, Illinois, and Missouri, and reshipping rates on the same commodities from reshipping points in the States named to points in Mississippi, were found to be reasonable in Mississippi Railroad Commission, et al., v. Alabama & Vicksburg Ry., et al., I. C. C. docket No. 14028.

The Mississippi Railroad Commission, the attorney general of that state, and various commercial enterprises located at points in Mississippi, contended that the local, proportional and reshipping rates on grain and grain products from points in the states mentioned to all points in Mississippi were unreasonable, unjustly discriminatory and prejudicial; and also contended that Memphis, Tenn., St. Louis, Mo., and Cairo, Ill., were unjustly favored by rules, regulations, and practices governing the handling, storing, sale, and disposition of grain and grain products, over points in Mississippi.

Mississippi produces no wheat and insufficient corn and oats to supply the needs of the state. Shortage is made up by shipping in supplies. The complaint sought to reduce the rates on the grain and grain products shipped in, for the benefit of the consumers.

Except in the case of alleged preference shown Memphis, Tenn., over Mississippi points, very little evidence was submitted. *Helena Traffic Buro v. M. P. R. R. Co.*, *supra*, contains a decision to the effect that:

Rates to Arkansas and to the Mississippi Valley represent the ordinary level of proportional grain rates to this territory. Rates to Memphis are extraordinary, and made to fit a peculiar situation. Memphis has long been what is termed in the grain business a "primary market." Rates have been made to break thereon. The adjustment is of long standing and the rates maintained are at a low level consistent with other proportional rates from the Missouri River.

In the case mentioned the Interstate Commerce Commission sought to preserve the revenues of the carriers and to fix proportional rates which would not disturb long-existing relationships. Complaint was made that Memphis was permitted various privileges on grain that Mississippi points were not.

The Interstate Commerce Commission declared that the maintenance of reshipping rates to and from Memphis without contemporaneously maintaining reshipping rates to and from Mississippi points, was not prejudicial. However, the complainants suffered under prejudicial rules, regulations, and practices under which grain or its products may be stopped at Memphis for milling, storing, or other transit services and later reforwarded at less than the sums of the local rates to and from Memphis. This situation was ordered corrected.

Income Tax Department

Conducted by M. L. Seidman, C. P. A.

[This is one of a series of articles on how to prepare income tax returns that will appear regularly in the Journal. Mr. Seidman is Chairman of the Committee of Tax Consultants of the Committee of American Business Men. He is a well known tax expert and has written numerous articles on taxation. Mr. Seidman will answer all questions on the subject directed to him by our readers. Such questions should be addressed to the Tax Editor. To receive attention, all communications should be signed by the writer. Mr. Seidman's answer, however, when published will not reveal the identity of the inquirer.]

Thus far in the series we have discussed who is subject to tax, who must file a return, and what exemptions are allowed. We can now consider the questions of when and where the returns must be filed.

Returns prepared on a calendar year basis, as is the case with most returns, must be filed on or before Mar. 15 of the following year. Returns covering the calendar year 1924, therefore, must be filed not later than Mar. 15, 1925.

Returns may also be prepared on what is known as a fiscal year basis. A fiscal year means a period of twelve months ending on the last day of any month other than December. Thus, the period from Feb. 1 to the next January 31 would be a fiscal year, or May 1 to the next Apr. 30.

In the case of returns made on a fiscal year basis, the returns must be filed by the 15th day of the third month following the close of the fiscal year. Accordingly, if the return were made on the basis of a fiscal year ending Jan. 31, the return would be due by the next Apr. 15, and if the fiscal year ended on May 31, the return would be due by the next Aug. 15.

It is important to bear in mind, however, that the only time returns can be prepared on a fiscal year basis is where the taxpayer's books are kept on that basis. If no books are kept, the return must be made on a calendar year basis.

Where returns must be filed. It is provided in the law that returns must be filed with the Collector of Internal Revenue for the district in which the taxpayer resides, or he may, if he desires, file the return in the district where he has his principal place of business. The country is divided into sixty-five collection districts, each supervised by a Collector of Internal Revenue, and it is with that officer for the taxpayer's district that the return must be filed. If a person has no legal residence or place of business in the United States the return must be filed with the Collector at Baltimore, Md.

The tax rates. The net income of an individual may be subject to two taxes: a normal tax and a surtax. The normal tax rates begin at 2% for the first \$4,000 of income in excess of the exemptions, then go to 4% on the next \$4,000 of income, and finally 6% on the rest of the net income.

Thus, if a married individual, with no dependents, had a net income of \$15,500, his normal tax would be computed as follows: the exemption of \$2,500 is first deducted, leaving \$13,000, subject to the normal tax. On the first \$4,000 of this \$13,000, a 2% tax is imposed, or \$80. On the next \$4,000, the rate is 4%, or \$160. On the rest of the income, or \$5,000, the rate is 6%, or \$300, making the entire normal tax \$540.

It is interesting to note that the normal tax rates this year are much less than what they were last year. Under the law that then existed, the tax was 4% on the first \$4,000, in excess of the exemption, and 8% on the balance.

The surtax. The surtax rates range from 1% to 40%, depending on the size of the income. The lowest rate begins with incomes over \$10,000. In other words, where an individual has a net income of less than \$10,000, he need not pay any surtax at all. The income between \$10,000 and \$14,000 is subject to a 1% surtax, or \$40. The income between \$14,000 and \$16,000 is subject to a 2% surtax; and so

on up the line. Income in the \$100,000 bracket is subject to 36%; \$200,000, 38%; \$300,000, 39%; and \$500,000 or over, the maximum of 40%.

These rates are considerably less than what was imposed last year, when the maximum rate was 50%. Last year, the maximum tax rates were 58%, 50% for surtax, and 8% for normal tax. This year the maximum tax rates are 46%—40% for surtax and 6% for normal tax.

The total of the normal tax and the surtax represents the total income tax that is due, except for the special treatment accorded so-called earned income, capital gains and losses, and certain credits that are allowed. These will be explained in detail in subsequent articles.

Estates and trusts being regarded as individuals, are subject to tax at the same rates as already outlined. Corporations, however, pay a flat tax of 12½% on their net incomes in excess of the exemption.

The difference between the tax rates on individuals and those on corporations immediately brings up the question as to the advisability of carrying on business under the one form or another. An individual does not come into the 12½% rate class until his income is about \$25,000. If his income is less than that, it is obviously to his advantage to do business as a sole proprietor, because the maximum tax rate would be less than the 12½% rate imposed on corporations. However, if his income exceeded \$25,000, he would ordinarily be better off doing business as a corporation, since the rate of the corporate tax is 12½%. Thus, an individual having a \$100,000 income would have to pay a tax of about \$23,000 because of the high surtax rates. A corporation, however, making \$100,000 pays a tax of only \$12,500, resulting in a saving of \$10,500 thru the corporate form.

There are many other factors to consider, such as salaries, dividends, etc., that need be carefully studied in each particular case. As a general proposition, however, it can be said that where the income is in excess of \$25,000, one is better off from a federal income tax standpoint, doing business as a corporation, and where the income is less than that amount, it is best to carry on business as a sole proprietor.

In the next article, the subject of earned income and how it affects the computation of the tax will be discussed.

Books Received

MISSOURI YEAR BOOK OF AGRICULTURE for 1924, by Jewell Mayes, sec'y of the Missouri State Board of Agriculture, gives facts and official data on the rural life of Missouri. It contains many cuts, diagrams and tables, also various statistics on crops. Published by the Missouri State Board of Agriculture, Jefferson City, Mo.

FREIGHT TRAFFIC RED BOOK, 1925 edition, revised to meet 1925 requirements, a practical reference book for the active traffic man, an everyday guide for the shipper, a condensed but comprehensive text book for the freight transportation student, is now off the presses. Many practical traffic men have contributed to make it an authoritative work. Rate bases, demurrage, storage, weights and weighing, transit privileges, freight claims, I. C. C. tariff rules, government regulation, Interstate Commerce Act, Transportation Act, express service, marine insurance, and various standard forms comprise a portion of the subjects thoroughly discussed. Cuts of various forms clarify the discussions. The book is arranged for ready reference and cross-reference and is invaluable to traffic managers. Cloth, 624 pages, 8x11 inches, with map of United States, Canadian and Mexican classification territories. The Traffic Publishing Co., 150 Lafayette St., New York, N. Y. Price, \$6.

Patents Granted

1,519,698. Bag Holder. John Person, Mora, Minn., assignor of one-half to Brother Solomonson, Mora. Curved arms project from a standard and are oscillatable about vertical pivots, and are normally swung apart by springs.

1,518,430. Conveyor Flight. Leonard E. Hurst and James F. Miller, Detroit, Mich. The block comprises two parts having longitudinal interengaging ridges and registering grooves in their engaging faces to receive shafts or trunnions, and means to secure the parts together.

1,519,241. Attrition Mill. Allan P. Daniel, Springfield, O., assignor to the Bauer Bros. Co., Springfield. The machine comprises a casing, a single grinding head supporting wall, means for hinging the wall to the casing whereby it may be opened at either side of the casing and means for adjusting the wall vertically in its relation to the casing.

1,521,973. Attachment for Corn Shellers. Edgar Specketer, Galva, Ia. Combined with a corn sheller having a casing are a suction pipe for removing the husks from the casing and a suction fan adapted to draw air from the casing and from said pipe, means for controlling the amount of air drawn through the casing, whereby the amount of air drawn through the pipe may be controlled at will.

1,521,290. Box Car Unloader. Frank L. Hague, Minneapolis, Minn., assignor to Fegles Construction Co., Fort William, Ont. The frame of the unloading apparatus carries an unloader belt provided with a plurality of brushes rocking in their supports to adjust the brushes for sweeping the angle of the car between its floor and side wall when the car is tilted on a longitudinal axis.

1,522,186. Grain Ventilator. Wm. S. Hiestand, Yates Center, Kan. The horizontal ventilating pipes are perforated only on their undersides, while the vertical pipes are perforated all around. An air-intake nozzle on the outside of the bin is connected to one of the horizontal ventilating pipes and an imperforated air-vent pipe has its inner end telescoped in the central vertical ventilating pipe and its outer end projected exteriorly of the top of the bin.

1,520,055. Separator and Grinder. Michael Feist, Rowena, Tex. The grinder consists of a main shaft, a threshing mechanism mounted upon the main shaft, a feeder on the main shaft arranged adjacent the threshing mechanism to feed grain thereto, grinding mechanism disposed at the opposite end of the feeder and operated by the main shaft, and means for receiving the grain from the threshing mechanism and delivering it to the grinding mechanism.

1,519,383. Weighing Mechanism. Herbert L. Merrick, Passaic, N. J. The mechanism has combined with a weighing beam arranged to support a load therefrom, of a poise weight movable upon the beam; a member rotatably carried by the beam connected to the poise weight; and means in continuous friction engagement with the rotatable member and coacting therewith when the beam is moved out of equilibrium to adjust the poise weight along the beam.

1,519,671. Car Seal. Emil Dietz, New York, assignor to American Casting & Mfg. Co., Brooklyn, N. Y. Combined with a bulb or head are a channel member consisting of parallel slotted pieces, supported rigidly within the bulb, a shackle whose ends are adapted to be inserted in the channel member, one end having a lug and engaging the channel member, and a spring catch within the bulb for interlocking both ends of the shackle and the channel member.

1,521,702. Automatic Weighing Apparatus. Jolly L. Morris, assignor of 51% to A. B. Coleman, Pittsburgh, Pa. The portable supply hopper has its discharge opening closed by front and rear abutting shutters operated by a hand lever in opening and by a spring in closing. Connecting means impart the movement of the scale to an auxiliary scale beam, which has on it a permanent magnet. The rear section of the shutter has a stop lug disengaged by magnet from a catch finger.

1,520,814. Automatic Weighing Apparatus. Jesse M. Evans, Springfield, Mo. Pivoted to a frame is a rotary body and each compartment being deeper forward of the upright plane of the axial line when the compartment is in the upper position, stops on the rotary body, a latch member supported on the frame in the path of said stops when the rotary body is in its upper position, and a lifting member in the path of said stops when the rotary body is below its upper position.

1,522,047. Grain Door Lifter. Hyrum J. Cragun, Ogden, Utah. Combined with a shaft are a drum loosely mounted on the shaft, a car door engaging member carried on the drum and adapted to be raised and lowered, means for connecting the drum and shaft for simultaneous rotation, means for rotating the shaft to elevate the car door engaging member, and means spaced transversely of the shaft for rotating said drum to elevate said car door engaging member, the last mentioned means being loosely mounted on the shaft and connected to the drum.

1,520,000. Safety Device for Conveyors. Robert E. Baker, and Arthur F. Cummins, White Plains, N. Y., and Eardley H. Ford, Los Angeles, Cal., assignors to Joseph Baker & Sons & Perkins Co., Inc., White Plains. The driving mechanism of the discharge device includes a member adapted to give way readily in case of an abnormal strain, to stop the operation of the discharge device if the latter meets an obstruction, and means, operated by the stoppage of the discharge device resulting from the breakage of the member, for arresting the drive of the conveyor.

1,521,929. Grain Separator. Clarence W. Carter, Minneapolis, assignor to Carter-Mayhew Mfg. Co., Minneapolis, Minn. The separator comprises an approximately horizontal internally pocketed rotary drum having internal end contractions for holding the commingled separable mass against travel axially of the drum, and a hopper within the drum into which certain of the selected materials will be delivered by said drum, the drum having its support at one end and being removable from its support by movement away from the same and being replaceable by movements toward said support.

1,519,941. Grain Container and Door. Geo. S. Soback, Jr., Luzerne, Pa. A flexible box-like body is shaped to fit within a car and has an opening adapted to coincide with the doorway and a flexible chute secured to the body about the opening of the body, the chute comprising a bottom and side walls, the side walls being foldable to form inwardly extended wings, and the bottom being foldable to overlie the wings, the length of the bottom being such that, when the bottom is folded, it will form a complete closure for the opening in the body, and releasably engaged elements on the bottom

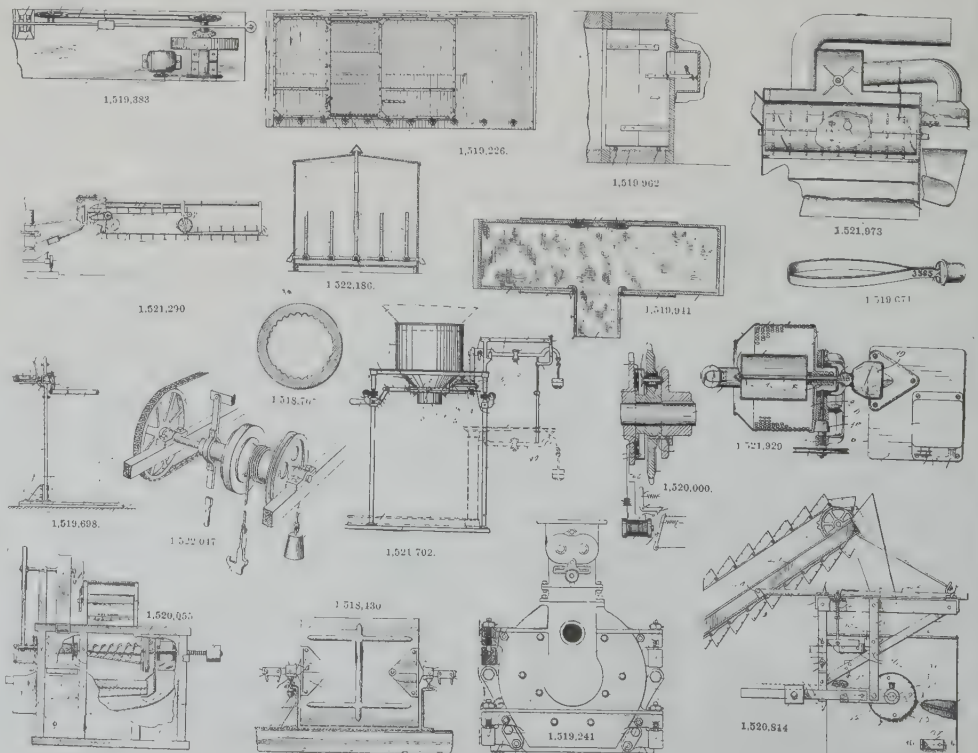
and the body, coacting to hold the bottom and the wings in folded position.

1,519,962. Grain Door. Winton H. Hardiman, St. Louis, Mo., assignor to H. P. Murmann, St. Louis. One of the pair of uprights is provided with a vertical slot thru which a door is mounted for sliding movement, the other upright opposite to the slotted upright being provided with a recess for receiving one edge of the slidable door, a bar rigidly connected to the door, a hasp pivotally connected to the bar, the door being recessed to permit the hasp to be folded into the recess and flush with the edge of the door, a keeper remote from the uprights and adapted to engage the hasp, and a gravity operated pawl engaging the hasp to force it into locking engagement with the keeper.

1,519,226. Grain Door. Wm. T. Tyler, Chicago, Ill. The grain door has rollers near its bottom edge with a track upon the car floor over which the door rollers travel and permitting the grain door to be moved between the door post members, the track having a longitudinal struck up portion to form a grain tight joint between the grain door bottom and the car floor, means upon the grain door preventing its withdrawal from between the door post members comprising a vertical flange adapted to engage one of the spaced apart members and form a grain tight joint therewith, and means upon the supplemental door adapted to engage and close the grain door therewith.

1,518,705. Conveyor Pipe. Peter H. Raun, Frederick, Md., assignor to the Frederick Engineering Co. The pipe has a plurality of corrugations cast integral with the interior walls of said pipe, the corrugations being positioned within an angle less than 180 degrees in the upper and lower portions of said pipe, one group of the corrugations being separated from the other group of said corrugations by substantially plane interior walls of the pipe, the corrugations extending parallel one to the other in the direction of the length of the pipe and each of the corrugations being spaced from an adjacent corrugation for a distance proportioned to the size of the pieces of material to be conveyed, whereby fluid pressure may be passed in the lower portions of the corrugations for buoying up material to be conveyed upon the upper portions of said corrugations for reducing the pressure of the material upon the interior walls of the pipe.

Middletown, Ind.—A shotgun, so placed in a corn crib that the opening of the door would cause it to be fired, ended the life of David Shockley, 34, on Jan. 3. The corn crib belonged to Allen Dennis, a farmer near here, who said he had placed the gun as protection against thieves. How do grain dealers protect their cribs from thieves?



Changes in Rates

As shown by tariffs recently filed with the Interstate Commerce Com'n the carriers have made the following changes in rates:

I. C. supplement No. 10 to tariff 601-J, I. C. C. No. A-10025, effective Jan. 24, makes several reductions in wheat and corn rates, applying between certain points in South Dakota and Illinois.

E. B. Boyd supplement No. 28 to Circular No. 1-R, Western Trunk Lines, I. C. C. No. A-1444, effective Feb. 1, makes some changes in the application of rates on grain, grain products and grain by-products.

C. R. I. & P. tariff No. 32149, effective Jan. 2, 1925, gives thru rates on wheat, wheat flour, wheat bran and wheat chaff from points in Oklahoma on the C. R. I. & P. and C. & O. W. to New York, N. Y., via Galveston, Tex.

C. R. I. & P. supplement No. 14 to tariff No. 29329-F, I. C. C. No. C-11214, effective Jan. 23, reduces the wheat and corn rates between stations in Group C (Kansas City-St. Joseph) and certain Iowa, Minnesota, and South Dakota stations.

C. & A. supplement No. 7 to tariff No. 1604-H, I. C. C. No. A-1626, effective Jan. 26, cancels the rates on all grains between Washington, Ill., and Pekin and Peoria, Ill. Routing and waybilling instructions are also given in this supplement.

C. & A. supplement No. 7 to tariff No. 28-E, I. C. C. No. A-1732, effective Jan. 26, states that unless otherwise specifically provided, Alton, Ill., will be considered as intermediate to East St. Louis, on traffic moving from, to, or thru Godfrey, Ill.

I. C. supplement No. 37 to tariff 1537-G, supplement No. 33 to I. C. C. No. A-9865, effective Jan. 23, cancels the thru rate on flour from Grayville, and Olney, Ill., to Evansville, Ind., when destined to Southeastern or Carolina territory, and makes the local rates applicable.

C. R. I. & P. supplement No. 31 to tariff No. 28675-F, supplement No. 30 to I. C. C. No. C-11230, effective Jan. 29, advances rates to and from Guthrie, Okla., account the station being abandoned. Groups 1, 2 and 3 rates on wheat, wheat flour and corn are reduced in this supplement.

C. R. I. & P. supplement No. 30 to tariff No. 28675-F, supplement No. 29 to I. C. C. No. C-11230, effective Jan. 15, gives commodity descriptions on grain, grain products, broom corn, alfalfa cake and meal, linseed cake and meal and seeds, and indicates what rates each commodity takes. Certain rate reductions are also made.

I. C. supplement No. 9 to tariff 601-J, I. C. C. A-10025, issued Dec. 12, further suspends supplement No. 2 to I. C. C. No. A-10025, I. C. tariff No. 601-J, on pages 2 and 3, the provisions shown under the captions "East St. Louis, Ill., St. Louis, Mo." in connection with all stations shown as located on the C. St. P. M. & O., until Jan. 12.

C. R. I. & P. supplement No. 17 to tariff No. 31408-C, I. C. C. No. C-11066, effective Jan. 18, gives instructions regarding the minimum weights on grain, grain products and seeds, the general application of rates and reduces the rates on wheat and corn from Rumsey, Richfield, Meadow, Neb., and broom corn from Oklahoma stations on the O. C. A. A. to Memphis, Tenn., and New Orleans, La.

Hail takes an annual toll thruout the world amounting to \$200,000,000. In United States alone insurance against it amounts to nearly \$600,000,000. For size of hailstones and violence of storms Europe holds the record so far. Natal, in 1874, witnessed hailstones weighing a pound and a half, smashing thru iron roofs. Spain claims stones, weighing as much as four pounds, have fallen there. Tho no deaths in America have ever been laid to hail, 250 people perished in a hailstorm in India in 1888. Exposure was the cause in most cases then, but several score are said to have died as a result of being struck by the huge hailstones.

Reparations.

The rate on wheat, in carloads, from points in western Nebraska to Great Falls, Mont., was found to be reasonable in Interstate Commerce Commission docket No. 14588, Royal Milling Co. v. Director General, as agent. The complainant contended that the rate charged for the transportation of 36 carloads of wheat from Bridgeport, Dalton, Lorenzo, Gurley, and Sidney, Neb., to Great Falls, which was 56 cents per 100 lbs., was too high in view of the fact that a 36-cent rate was subsequently established in order to relieve drought conditions, and expired by limitation on June 1, 1920. Complaint was dismissed.

The Interstate Commerce Commission modified its original report, 89 I. C. C. 405, in docket No. 14159, to read: That the maintenance of or participation in by the Missouri Pacific over its west-side route of rates on grain and grain products from Kansas City, Mo., from points in Kansas from which the rates make on Kansas City combination, and from points in Missouri from which rates are made with relation to Kansas City to Helena, more than 2.5 cents on wheat and 1.5 cents on coarse grains higher, and from points in Nebraska and Iowa, and Missouri, except St. Louis, from which rates base on St. Louis, to Helena more than 6 cents on wheat and 4.5 cents on coarse grains higher, than the rates contemporaneously maintained to Memphis, is, and for the future will be, unduly prejudicial to Helena and unduly preferential of Memphis.

Further hearing of Intermediate Routing, 81 I. C. C. 272, restriction by Great Northern of a 59-cent rate on corn from stations in South Dakota on the C. M. & St. P. and the C. & N. W. via the Great Northern lines from Aberdeen, S. D., to destination in Montana, Idaho, Washington, and Oregon, showed the rate to be unjustified. The applicable tariff items were ordered cancelled in Interstate Commerce Commission, docket No. 1766, Intermediate Routing via North Dakota Junctions on Transcontinental Traffic and the former report was accordingly modified. The base rate found applicable was 59 cents. The rates that had been charged over the branch line of the Great Northern from Aberdeen thru Rutland, N. D., to Yarmouth, Minn., was 64 cents. The decision of the case in hand showed it should have been 59 cents and the 64-cent rate was inapplicable. Complainants and corporations with headquarters in Minneapolis, who suffered under the 64-cent rate were declared entitled to reparation with interest.

International Chamber Will Meet.

Representative business men from thirty-nine countries, including a large delegation from the United States, will meet in Brussels, June 21 to 27, 1925, to discuss important world economic problems which will be taken up at the third general meeting of the International Chamber of Commerce, according to an announcement made today by the American Section.

As a preliminary to the Brussels meeting an international committee composed of the ablest business men of all the important commercial nations of the world will make an economic world survey for the purpose of determining what measures must be taken to solve the problems that will arise in the wake of the operation of the Dawes plan and to stimulate production, revive industry and restore international trade.

The Brussels meeting will take on the color of an unofficial international economic conference, and, it is expected, will result in the adoption of certain definite principles of economic reconstruction in much the same way that the Rome meeting of the International Chamber in 1923 paved the way for the formulation and adoption of the Dawes report.

Other important measures which are pending before the International Chamber and which will be discussed at the Brussels conference are the elimination of duplicate taxation, the limitation of national armament in order to lighten the burdens of taxation, the development of a uniform bill of exchange and agreement among governments for comparable and up-to-date statistics of an international character.

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Calpack Code (1923) is designed to succeed and replace the codes published by the J. K. Armsby Co., and the California Fruit Canners' Ass'n in the fruit and vegetable packing industry. Size 6¼x8¼ ins. 850 pages, bound in keratol. Price \$10.00.

All prices are f. o. b. Chicago.

GRAIN DEALERS JOURNAL
309 So. La Salle St., Chicago, Ill.

Supreme Court Decisions

Foreclosure of Mortgage on Wheat.—Where mortgagee of wheat sued to foreclose and accepted benefits of sale thereof by receiver appointed in suit, he could not thereafter sue purchaser from mortgagor for failure to perform contract.—*Farmers' State Bank of Kahlotus v. Pacific Grain Co.* Supreme Court of Washington. 230 Pac. 648.

Contract for Lower Rate Invalid.—A contract between an interstate carrier and a shipper fixing rates differing from its published rates filed with the Interstate Commerce Commission, which is prohibited by Interstate Commerce Act, §§ 2, 6 (Comp. St. §§ 8564, 8569), is void.—*Central R. Co. of New Jersey v. United States Pipe Line Co.* U. S. Circuit Court of Appeals. 1 Fed. 2nd 866.

Title in Innocent Purchaser of Warehouse Receipts.—Bank Act Canada, 3-4 Geo. V, c. 9, §§ 88, 89, does not vest in bank fee title to goods pledged with it to secure loan, and on pledgor's removal of such goods to United States with bank's consent, innocent purchasers of warehouse receipts for value obtained title thereto.—*Standard Bank of Canada v. Lowman et al.* U. S. District Court, Washington. 1 Fed. 2nd 935.

Measure of Damages for Injury in Transit.—Difference between market value at point of delivery, of animals injured during shipment, and their value when delivered to carrier, is not proper measure of damages, and evidence of market value before injury is inadmissible. Measure of damages for injury to animals during transportation is difference between value at point of destination in damaged condition and value if uninjured.—*Morrow et al. v. Wabash Ry. Co.* Kansas City Court of Appeals. 265 S. W. 851.

Foreign Judgment on B/L Not Recognized.—Where steamship company delivered goods to nonconsignee on nonnegotiable B/L, it was liable to assignee of negotiable bills for value of goods, limited by amount stated in B/L, and prior judgment of French court for steamship company was not bar to action, where bills were made in this country; carrier's patent breach of duty precluding recognition of French judgment.—*Johnston v. Compagnie Generale Transatlantique.* U. S. Supreme Court of New York. 206 N. Y. S. 413.

Wholesaler Liable to Retailer of Unwholesome Food.—Wholesaler is liable on his implied warranty that food purchased from manufacturer sold for human consumption is wholesome and fit for purposes intended; wholesaler's remedy being against manufacturer. Buyer of food from wholesaler cannot recover from manufacturer for breach of implied warranty that the food is wholesome and fit for purposes intended, there being no privity of contract between them.—*J. Aron & Co., Inc., v. Sills et al.* U. S. Supreme Court, New York. 206 N. Y. S. 695.

Official Inspection Final.—Where contract for sale of hay provided that shipments were subject to certain inspection grades, and two carloads were rejected by buyer, whereupon seller disposed of them and refunded to buyer outlays made on account of shipment, after which buyer accepted subsequent shipments accompanied by inspector's certificates, which were conclusive as to quality of hay, thus recognizing contract as still existent, he could not thereafter rescind.—*Fry v. Grangers' Warehouse Co. of Enumclaw.* Supreme Court of Washington. 230 Pac. 423.

Insurance.—That insurers had notice from the records of a mortgage on the property when the policy was issued, and actual knowl-

edge that because of default the mortgage was subject to foreclosure proceedings, which under its terms avoided the policy, at the time riders were attached in which the foreclosure provision was waived as to the mortgagee, held not to preclude them from setting up such provision as a defense to an action by the insured mortgagor after a loss.—*Neil Bros. Grain Co. et al. v. Hartford Fire Ins. Co. et al.* U. S. Circuit Court of Appeals. 1 Fed. 2nd 904.

Second Mortgage on Wheat Crop.—Under doctrine of marshaling assets, first mortgagee, having mortgage covering wheat, horses, farm implements, etc., as against second mortgage on wheat only, was bound to make what it could out of property covered solely by its mortgage, by foreclosure and sale or otherwise, and credit such sums on its indebtedness, and if insufficient, was entitled to such portion of net proceeds of sale of wheat as necessary to pay it, and second mortgagee was entitled to surplus, if any.—*Shoemaker v. White-Dulane Co. et al.* Supreme Court of Washington. 230 Pac. 162.

Negligent Failure to Deliver Telegram.—Where free delivery limits are fixed by telegraph company's regulations, it must use reasonable diligence within these limits to deliver telegram. In action for failure to deliver telegram, evidence that delivery of another telegram to a third party, relating to same subject-matter, sent to same telegraph office, addressed to a well-known place of business 100 yards from telegraph office, was delayed six or seven hours, held to tend to show want of special effort to deliver telegram in question.—*Western Union Telegraph Co. v. Pope.* Supreme Court of Arkansas. 265 S. W. 965.

Collecting Freight-Undercharge.—Carrier of interstate shipment, under Interstate Commerce Act (U. S. Comp. St. § 8563 et seq.), cannot estop itself from collecting undercharge of freight rates. Carrier of interstate shipment may collect undercharge, tho agent made mistake as to amount due, and lien was lost by delivery of freight on payment of less than legal rate. Under Interstate Commerce Act (U. S. Comp. St. § 8563 et seq.) fixing freight charges, defendants, named as ones to be notified, in B/L, naming shipper both as consignor and consignee, who paid freight and received shipment, became in law the consignees and owners, and were liable to railroad for undercharge of freight, and no agreement with shipper nor estoppel by conduct of railroad could relieve them.—*Nashville, C. & St. L. Ry. Co. v. Gilliam et al.* Supreme Court of Alabama. 101 South. 889.

Buyer's Remedy for Breach of Warranty.—Where a commodity of a certain defined and well known grade and quality is sold and agreed to be delivered, but upon delivery is ascertained to be of an inferior grade and quality, wholly unfitted to the uses for which it was purchased, the buyer is not required to tender back such commodity as a condition precedent to the right to maintain an action or cross-petition for breach of warranty. Where, in such case, the buyer unloads the shipment and within a reasonable time forwards samples to the seller, together with notification of the inferior and unsatisfactory grade and quality, but thereafter uses a part of the shipment, the question of whether the amount used was for the purpose of testing the quality or constituted as an acceptance, is a question of fact for determination by the jury under proper instructions, but, where the verdict is clearly contrary to the evidence upon this issue, a judgment based upon such verdict will be reversed.—*Iron Trades Product Co. v. Murray Tool & Supply Co.* Supreme Court of Oklahoma. 230 Pac. 702.

Chicago Board of Trade Weighmaster Reports.

J. A. Schmitz, weighmaster and custodian of the Chicago Board of Trade, in his 2nd annual report, states that the total number of cars weighed by the Weighing Department during 1924 was 233,549, compared with 213,704 cars weighed during 1923. Grain weighed to and from boats totaled 86,396,454 bus., compared with 46,674,735 bus. in 1923. Seed and grain products in bags weighed at warehouses, freight depots, etc., totaled 1,065 bags. The total number of bus. of grain, grain products and seed weighed during 1924 was 443,192,429 bus. compared with 366,004,058 bus. during 1923.

Special weight investigations were made on 263 received cars, 75 shipped cars and 24 cross-town (switched) cars. These disclosed causes for weight differences on 51 of the cars.

Of the total inbound cars weighed 10,966, or 9.03%, were recorded leaking as compared with 10.4% in 1923. No shipped cars left in a leaking condition.

At interior grain handling stations tributary to Chicago the department tested 11 scales, 5, or 45% of which were found to be weighing incorrectly. At Chicago 648 scales were tested, of which 74, or 11.4% were in need of repairs or adjustment.

Activities of the Weighing & Custodian Departments resulted in 32 persons being arrested in railroad yards, 16 of whom were convicted, 11 paroled, and 5 discharged with warnings from the court.

Handling of Claims for Loss in Transit.

A. P. Husband, sec'y of the Millers National Federation, in a circular to members, Jan. 7, said:

The questions of loss on grain in transit and the railroads' liability for such loss have caused an endless amount of controversy between the grain and milling interests and the railroads, extending over many years. Numerous conferences between carriers' and shippers' representatives were held without anything very tangible being accomplished, and some years ago the matter was submitted in an informal way to the Interstate Commerce Commission, who instructed that a small working committee consisting of railroad and shippers' representatives be organized, with the idea of working out some arrangement that would be satisfactory to all concerned.

E. S. Wagner, traffic director of the Federation, representing the milling interests, was a member of the committee so organized and participated in numerous conferences during the years 1918-1919; in all about six weeks were consumed in the work. Difficulty was encountered, however, in arriving at a set of working rules satisfactory to all interests, and the matter has dragged along for some time with very little progress being made.

Recently one of the eastern lines submitted a tentative set of rules, it being understood that if such rules were satisfactory to shippers they would be adopted by all lines throughout the country. A number of western grain interests objected to the proposed rules, explaining that they could not subscribe to any agreement or understanding with the carriers that is in violation of state or federal laws which definitely prescribe the extent to which a carrier is liable.

The proposed rules as suggested by the carriers have therefore been withdrawn, and we now understand the National Industrial Traffic League has been requested to handle the matter with the railroads.

Santa Rosa, Cal.—Luther Burbank has developed a new sweet corn which is said to be sweeter and grow bigger than any corn now grown.

Texhoma, Okla.—The Texhoma Elevator Co. recently sold 10 cars of broomcorn in a single week to Wichita, Kan., buyers.

Railroad Claims Collected

Send in Claims of every description. No Collection. No Pay
The Security Adjustment Co., Inc.
 1132 Builders Exchange Bldg., MINNEAPOLIS, MINN.
 References: Any bank, mercantile agency, commission firm or editor of this publication.

Seeds

Modesto, Cal.—Loomis Seed Co. was recently organized here. Geo. Loomis heads the organization.

St. Anthony, Ida.—Seavey M. Bartley is now agent here for the Everett B. Clark Seed Co., of Milford, Conn.

The North Dakota Pure Seed laboratory has started field registration of Grimm alfalfa in connection with its certification work.

New York, N. Y.—Payne-Curtin Co. has been formed by Avery F. Payne and George L. Curtin. They will conduct a general seed brokerage business.

Chicago, Ill.—Harry G. Beale, of the Ohio Farm Bureau, has been elected vice-pres. of the Federated Seed Service, an organization for the improvement of seed corn in the Corn Belt.

Spokane, Wash.—The building formerly housing the Inland Seed Co. is now occupied by the Farmers Seed & Supply Co., operated by H. J. Beneke and his two sons, Henry and George, proprietors.

Ames, Ia.—The Iowa Corn & Small Grain Growers Ass'n has completed arrangements for \$3,000 in cash prizes and 700 to 800 ribbons for winners in the annual show of the organization to be held in this city Feb. 2-7, inclusive.

Lockhart, Tex.—Alvin R. Alves has filed trade mark No. 202,234 to represent field and vegetable seed. A circle inside a hexagon is divided horizontally by a band. The upper half of the circle contains "A K Co"; the lower half, "Seed."

The International Seed Trade Rules and the arbitration rules of the Wholesale Grass Seed Dealers Ass'n have been published in a booklet now being distributed by Clarence K. Jones, sec'y-treas. of the Ass'n, 110 South St., Baltimore, Md.

"**Why the American Farmer Should Produce Flaxseed**" is the title of an address broadcast from the Gold Medal radio station, Minneapolis, on Dec. 11, and now being broadcast in pamphlet form by the Archer-Daniels-Midland Co.

Louisville, Ky.—Samuel Richardson Chambers, 74, pres. of the Chambers Seed Co., died at his home Jan. 3. Mr. Chambers began in the seed business in Louisville in 1872 and remained connected with it until his death. Mrs. Molly Lock Chambers, his widow; Kirby L. Chambers, his son; Mrs. Mary Gaut, his daughter, and two grandchildren survive him.

Receipts and Shipments of Seeds.

Receipts and shipments of seeds at the various markets during December, compared with December, 1923, were as follows:

FLAXSEED				
	Receipts		Shipments	
	1924	1923	1924	1923
Chicago, bus...	365,000	172,000	2,000	.....
Duluth, bus....	660,426	554,594	1,232,801	1,351,193
*Ft. William, bus.	1,616,094	.....	659,901	.....
Milwaukee, bus.	110,065	37,180	432	.....
Minneapolis, bus.	1,374,720	877,260	283,050	.....
Superior, bus.	421,379	244,155	124,204	197,279
TIMOTHY				
Chicago, lbs...	1,552,000	1,329,000	1,426,000	1,001,000
Milwaukee, lbs.	292,695	214,735	161,675	388,570
CLOVER				
Chicago, lbs...	1,801,000	1,039,000	827,000	674,000
Milwaukee, lbs.	814,282	260,075	385,653	879,411
New York, bus.	1,127	.....	10,632	.....
KAFIR AND MILO				
Ft. Worth, cars	326	97	32	13
Kans. City, bus.	1,151,700	349,800	594,000	273,000
St. Louis, bus.	228,000	13,200	182,190	12,780
Wichita, bus.	20,400	14,400	1,200	12,000

*4 weeks ending Dec. 27.

Kentland, Ind.—Roy A. Stanton has acquired all the stock of the Ainsworth-Boon Seed Corn House. The building is 5 stories high, 60x150 feet, frost proof, and contains 300 windows and doors which may be opened in good drying weather.

University Farm, Minn.—A. C. Arny, of the University of Minnesota, says Minnesota grew 650,000 acres of flax during 1924. He adds that the state should grow a million acres in 1925. At three-quarters of a bushel per acre this should require three-quarters of a million bushels of seed.

Wholesale seed firms operating southern branches in Atlanta complain that they will locate these branches outside of the state of Georgia unless a reduction in the present corporation taxes, on outside firms operating within the state of Georgia, is soon effected. The taxes at present are claimed excessive. As a result the Atlanta Chamber of Commerce is conducting a survey with a view to finding a means whereby the taxes can be reduced.

Minneapolis, Minn.—Undoubtedly the shortage of flaxseed for 1925 will be acute, for our crop is largely absorbed and we must go to Argentina for further supplies. Wheat is continuing to sell at a high level and flaxseed prices are influenced to a large extent by it. Europe has the buying habit and will probably continue to buy flaxseed in 1925 on the same scale as in 1924. Comparatively little flaxseed is left in this country and there is almost sure to be a scramble for the Argentine crop, which is estimated to be 20,000,000 bus. under what it was last year.—Archer-Daniels-Midland Co.

Flag Smut Control Efforts Stopped.

Efforts to exterminate Australian flag smut in wheat have proven so ineffectual against the spread of the disease that the Illinois Department of Agriculture has abandoned the fight and will henceforth confine itself to urging the farmers to plant resistant varieties.

The disease was first observed in Madison county, Ill., 5 years ago and has since spread to Missouri and Kansas as well as thru a number of Illinois counties. A wheat quarantine threatened at one time, but as Missouri and Kansas made no active fight against infection the quarantine never was made effective.

In hopes of overcoming the disease indirectly, Illinois bought 700 bus. of seed wheat of a resistant variety last season and distributed it among the farmers in the most infected counties with the understanding that they would plant it for seed only. The plan has made available approximately 5,000 bus. of resistant wheat for the next crop. Several bearded and smooth varieties of wheat have been found resistant to the disease.

Chicago, Ill.—The first deliveries of cotton on Chicago-made contracts were made on Jan. 7. They consisted of 200 bales delivered on January contracts.

Imports and Exports of Seeds.

Imports and exports of seeds for November, compared with November, 1923, and for 11 months ending with November, are reported by the Bureau of Foreign and Domestic Commerce as follows:

IMPORTS				
November		11 mos. ending Nov.		
1924	1923	1924	1923	
Alfalfa, lbs....	433,115	1,893,699	8,170,179	8,251,229
Beans, lbs....	4,351,280	2,103,111	61,809,865	120,971,805
Peas, lbs....	4,043,226	1,777,617	22,019,125	16,186,434
Clover, lbs....	2,721,224	3,857,879	40,071,775	21,640,181
Gr. seeds, lbs....	534,143	966,246	2,796,018	9,076,242
EXPORTS				
Alfalfa, lbs....	146,131	24,152	345,884	388,306
Beans, bus....	66,495	85,860	533,646	642,799
Peas, bus....	10,126	18,954	69,157	105,306
Timothy, lbs....	2,595,411	1,741,648	15,555,572	16,884,721
Clover, lbs....	503,849	28,132	1,493,665	1,505,815
Other gr. seeds, lbs....	894,048	930,317	3,516,036	3,541,150

LOOK OUT!

FOR

HEAVY LOSSES

HANDLING

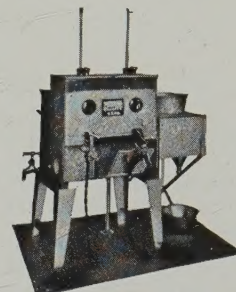
WET CORN

MOISTURE TESTERS

can be used profitably NOW

Seedburo Quality

is now used by the Government, Grain Inspection Departments and more than 10,000 mills and elevators.



OFFICIAL BROWN-DUVAL MOISTURE TESTERS

in all sizes from one compartment to six, heated by gas, electricity or alcohol.

HEAT YOUR TESTER with Electricity—with or without automatic shut-off.



SPECIAL "FOUR-IN-ONE" SCALE NO. 14

This scale, designed and manufactured by us, satisfies a long-felt want in the grain trade, for a small, complete office scale for weighing samples for moisture test and for determining test weights for bushel, dockages, weights for mailing, samples, etc.

Write for prices on moisture testers and complete catalog of SEEDBURO Quality grain and seed testing equipment, which includes grain grade specifications.

We are the largest handlers of Grain and Seed Testing Equipment in the world.

Adequate stock always—prompt shipment is assured. We will appreciate your business.

SEED TRADE REPORTING BUREAU

1018 S. Wabash Ave., Chicago, Ill.

Successors to
Hess Warming & Ventilating Co.,
On Grain and Seed Testing Equipment

Supply Trade

Business is at the point where an advertising push will do a lot to make it better.

Among the calendars received is one of a convenient size from the Cyclone Blow Pipe Co., Chicago.

Washington, D. C.—The Associated General Contractors of America will meet in this city Jan. 12-15, inclusive.

Kansas City, Mo.—The American Steel Works has been organized here and will specialize in all kinds of sheet metal works for grain elevators and flour mills. C. R. Huston and C. H. McClelland are the principals in the new organization.

Kansas City, Mo.—Horner & Wyatt, grain elevator designers and builders, announce the removal of their offices to the New Board of Trade Bldg. They also announce that they have with them C. H. Chalmers, who formerly was with their organization.

National invoice, purchase order and inquiry forms of the National Ass'n of Purchasing Agents are being given considerable attention by 41 national trade ass'ns. They will be discussed at a conference called by R. M. Hudson, chief of division of simplified practice of the Department of Commerce, which will be held Wednesday, Jan. 14, 10 a. m., in the Commerce Building, Washington, D. C.

Chicago, Ill.—E. K. Ludington, head of the Chase Bag Co. has been elected president of the newly organized Chase Bag Co., Inc., formed as a result of the merger of six leading manufacturers of cotton and bur-lap bags. The new company has an authorized capitalization of \$12,000,000. Executive headquarters will be located in the Woolworth Building, New York City. The companies which make up the new corporation are: Chase Bag Co., St. Louis; Chase Bag Co., Kansas City; American Bag Co., Memphis, Tenn.; Cleveland-Akron Bag Co., Cleveland, Ohio; Buffalo (N. Y.) Bag Co.; Milwaukee (Wis.) Bag Co.; Northern Bag Co., Minneapolis.

Industry's underlying business conditions are sound and encouraging. Business, generally, seems to have profited by its experiences in the past several years of over-inflation, with the result that both manufacturer and retailer are keeping production in better balance with sales. The farmer is coming into his own and in 1924 his purchasing power increased over \$750,000,000 and for the first time in several years the price of farm products and that of manufactured goods are very nearly on a common level. United States is the great money lender of the world and because of our loans foreign business is certain to be on the upgrade in 1925.—Wm. O. Rutherford, pres. Rubber Ass'n of America.

Chicago, Ill.—Foote Bros. Gear & Machine Co. has recently completed arrangements with F. Somers Peterson Co. of San Francisco for distribution of IXL Gear Products and Speed Reducers in northern California and with the Thomas Machinery Co., of Los Angeles, for the southern section. The Pacific Coast distributing organization now covers offices at Los Angeles, San Francisco, Seattle, Portland and Vancouver, B. C.

Insurance Notes.

Necessary changes in the constitution and by-laws of the Fire Underwriters Ass'n of St. Louis have been ratified for legislation to make effective the new rules and regulations scheduled for Jan. 1. The effective date has been postponed until Feb. 1 that companies and agents may have time to remove any conditions not in accord with the new plans.

In an attempt to show the Associated Employers Reciprocal of Chicago, now in the hands of federal receivers, to be solvent from a bankruptcy viewpoint, counsel for Sherman & Ellis, Inc., attorney-in-fact, has filed a detailed statement of property and assets, and debts and liabilities with the Federal District Court, in the bankruptcy proceedings instituted some months ago.

Indianapolis, Ind.—Celebration of "Indiana Insurance Day" will be conducted at the Claypool Hotel here on Jan. 20. Claris Adams, who has national fame as a speaker on insurance, will preside. The program includes Congressman Chas. L. Underhill, Massachusetts, chief opponent of the Fitzgerald bill, which would establish a monopolistic state fund for workmen's compensation in the District of Columbia. The celebration will show how insurance has contributed to business, banking and industrial interests.

Changes in the Kansas insurance laws are almost a necessity, according to William R. Barker, superintendent of insurance in that state. He contends that the propriety of taxing insurance premiums should be given a detailed investigation, since such an indirect tax is inordinately expensive to the citizens of the state. Removal of the tax would be followed by a corresponding reduction in insurance rates. Thus an amount in excess of \$1,500,000 would be saved the people with a loss of only \$750,000 in taxes.

Lightning protection in the form of lightning rods cannot be overestimated. Recently lightning struck a smokestack of the Everett-Aughenbaugh milling plant at Waseca, Minn., practically demolishing it. The smokestack was of brick and the lightning bolt cracked it all the way down one side, while on the other side patches amounting from two or three bricks to masses weighing around a ton were knocked out with explosive violence. Some were thrown as much as 300 feet from the stack. The roof of the plant was punctured here and there,

where great masses fell thru. A water tank on top of the roof was demolished. Lightning rods would have saved the concern heavy repair costs.

Western Millers' Mutual Report.

Receipts for the year 1924 totaled \$148,634.87, reports the Western Millers' Mutual Fire Insurance Co., Kansas City, Mo., in its 42nd annual statement dated Dec. 31. Of this, \$133,399.13 was premiums and \$15,235.24 interest. Cash on hand, in banks and securities, Dec. 31, 1923, amounted to \$373,500.16.

Disbursements struck a total of \$127,413.74. Of this, losses took \$84,195.59; expenses, \$37,002.34; and premiums and dividends returned, \$6,215.81. Cash on hand, in banks and securities, on Dec. 31, 1924, amounted to \$394,720.79.

Gross assets amount to \$406,810.22. Premiums in the course of collection account for \$12,089.43. Cash assets amount to \$394,720.79, divided into United States securities, \$161,350; school-municipal bonds, \$200,133.63; cash in banks, Dec. 31, 1924, \$33,237.16.

The company has no outstanding losses due and payable. Losses in the process of adjustment are estimated at \$100. The reserve for reinsurance and dividends, general business, equals \$13,697.28 and unearned premiums, \$14,478.20. This makes the total liabilities \$28,275.48.

Total losses paid by this company since its organization in 1883 amount to \$1,914,573.22; total insurance now in force, \$13,907,792.

Water Barrels in Winter.

A leaflet being distributed by the Grain Dealers National Mutual Fire Insurance Co., remarks, "An elevator loss is generally under \$200 or it is total. To keep it under \$200 the fire must be caught the first two minutes." That is when water barrels are most helpful.

Frozen water barrels, however, are useless in fighting a blaze. The Grain Dealers Mutual remarks that,

Fires are of two kinds—those that require smothering; those that must be cooled or quenched.

Oil and electric fires come under the first designation. Carbon tetrachloride extinguishers (the small pump type) should be used on fires of this kind. Never use water, as it spreads an oil fire, and is a conductor of electricity.

Most elevator fires come under the second designation, and that's the reason we are such strong advocates of barrels and buckets. And then, you know, it is second nature for a man to throw water on a fire. For that reason it is still the most effective piece of fire-fighting equipment ever invented.

Difficulties with water barrels can usually be traced to the use of poor barrels or weak solutions or both. Manufactured steel barrels are the most satisfactory because they are built for the purpose. They are painted inside with asphalt paint, have three buckets hung inside and are provided with a tight-fitting cover.

Old steel oil drums or other such containers make good water barrels, provided you use a calcium chloride solution in them. Because calcium chloride will dissolve solder, a pound of lime should be dissolved in the solution to counteract this tendency—either that or the inside of the barrel should be given a good coat of asphalt paint.

Calcium chloride solution, 125 lbs. to 50 gals. water, freezes at zero F.; 150 lbs. to 50 gals., at 8 below zero; 170 lbs. to 50 gals., at 19 below; 190 lbs. to 50 gals., at 32 below; 200 lbs. to 50 gals., at 39 below.

The only real advantage in using wood barrels is that salt must be used in them; but a salt solution becomes foul in time. A calcium chloride solution does not.

If you use wood barrels use good ones. Coat the inside with asphalt paint. Fill with water and salt, stirring until all the salt is dissolved. Four pounds of salt to a gallon of water gives good results.

Provide at least two pails for each barrel, preferably round-bottom ones. If you use calcium chloride the pails can be suspended inside the barrel, but this cannot be done where salt is used. It will rust them.

During 1923, twenty-nine elevators insured for \$376,200 were saved with a barrel of water or fire extinguishers. During 21 years, barrels of water or extinguishers have been the means of saving 129 elevators which were insured for \$1,520,308.

This should be sufficient argument for the maintenance of barrels and buckets, and other fire-fighting equipment in the elevator.

Fire Barrels That Will Not Freeze at 55° Below Zero



Our 50 gallon Metal Fire Barrels will save you any worry. Complete with 3 buckets hung on hooks and submerged in anti-freeze solution ready for instant use.

Write for full particulars to

CARBONDALE CALCIUM COMPANY
CARBONDALE, PENN.



Your Property Isn't Exempt

Your mill or elevator may be destroyed by fire or explosion. Every mill and elevator owner is faced with that possibility. Would it mean the end of your business, the business into which you may have put your all, or will it mean merely an annoying wait until a new structure, insurance built rises from the ruins of the old?

Hartford Mill and Elevator Insurance guarantees the continuance of your business in case of Fire or Explosion. Hartford Mill and Elevator Engineers will make regular inspections recommending changes which, carried out, will cut down your fire and explosion hazard.



A seal of certainty
on an insurance
policy

**Cleaner Elevators
mean fewer fires.**

Hartford Fire Insurance Co.

Mill and Elevator Department

H. W. Donnan, Supt.

410 N. Michigan Ave.

Chicago, Illinois

LIGHTNING

A Menace to the Country Elevator

Every elevator should have some kind of LIGHTNING protection. Find out what kind your elevator needs to make it safe, and install it NOW or just as soon as the weather permits. Don't get caught by the spring storms.

Write us for full information.

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309 Keeline Bldg.
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GRAIN DEALERS
NATIONAL MUTUAL FIRE INSURANCE CO.
INDIANAPOLIS, IND.

C. A. McGOTTER
Secretary
Indianapolis
Indiana

25% of Elevator Fires are caused by Lightning.

Western Grain Dealers Mutual Fire Insurance Company

DES MOINES, IOWA

J. A. KING, President GEO. A. WELLS, Secretary
A Legal Reserve Mutual Fire Insurance Company

ZERO

Weather always brings
an increase of fire losses.

Unsafe stoves, stove
pipes, chimneys, fur-
naces and unprotected
steam pipes all con-
tribute.

**IS YOUR PLANT
SAFE FROM THE
HEATING HAZARD?**

Mutual Fire Prevention Bureau

230 E. Ohio Street
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Representing the Mill Mutual Fire Insurance Companies

Tri-State Mutual Grain Dealers Fire Insurance Co.

LUVERNE, MINNESOTA

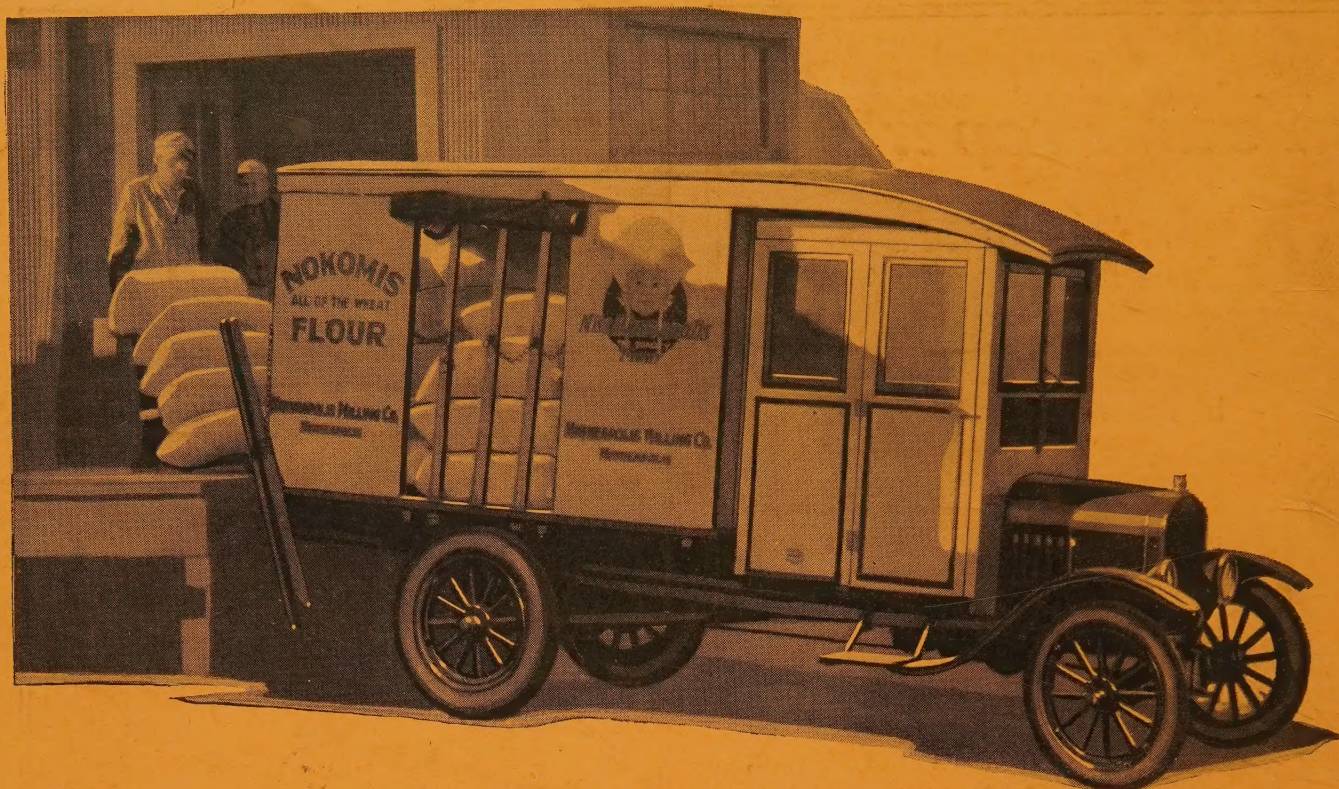
We write Fire & Tornado Insurance on Grain Elevators, Residence and Mercantile property.

The premium return has averaged 50% for 22 years.

Write the Secretary for application blanks.

E. A. Brown, Pres.
W. J. Shanard, Vice Pres.

E. H. Moreland, Secy.
W. Z. Sharp, Treas.



“For Our Rush Orders And For 15 Barrel Orders

*The Ford Ton Truck is Fitting Our Requirements
Satisfactorily and Economically”*

Martin Luther, Minneapolis Milling Co., Minneapolis, speaks from experience! Twenty months' use of the Ford Ton Truck has convinced this company that Ford Trucks have a definite earning power in the milling business. For special delivery of light loads and for heavy hauling, the Ford Ton Truck with and without trailer, (depending on load), has proved a most satisfactory and most economical means of transportation.

The Minneapolis Milling Co. uses this Ford Ton Truck for delivery to retail customers and bakers in Minneapolis and suburban towns. The average mileage per day is 40 miles.

As the photograph shows, the Ford Ton Truck is easily handled around loading docks and railroad cars. The two-speed planetary transmission, which is an exclusive feature of Ford Trucks, simplifies control and greatly facilitates rapid speed changing when operating through heavy traffic. This makes for more efficient delivery. Ford Ton Trucks are built to meet the unusual service demanded by millers.

Your nearest Authorized Ford dealer will gladly supply you interesting cost data on Ford Truck operation in your business. Also give you a practical demonstration any time you say!

Ford Ton Truck Chassis, \$365 f. o. b. Detroit

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